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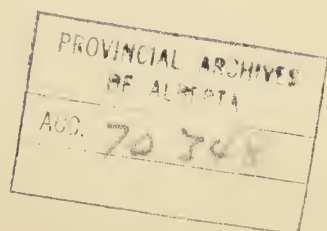



CLOTHING

BAXTER • LATZKE

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TODAY'S CLOTHING

Today's



C L O T H I N G

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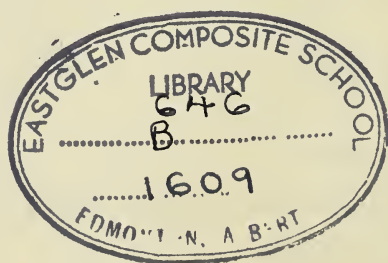
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Foreword

The teaching of home economics to adolescent girls has, during the last several years, become of great importance. It has become so not only for its utilitarian value but because of its cultural significance and the development of a more inclusive conception of the intrinsic worth of the subject by modern educators. Along with this understanding, and more consistent with it, is the development of a new, effective instructional literature. This text, which appeared first as *Modern Clothing* and later as *You and Your Clothes*, is a widely accepted and worthy contribution to this steadily growing literature.

The authors of this book conceive the aim of education to be an effort toward satisfying, as fully and abundantly as possible, human wants at any given level. The purpose of education, therefore, becomes one of helping the individual to do better those things which he will have to do anyway, and to lead him to higher and more desirable activities. The content of this book is a result of many years of experience in determining the needs of girls at the secondary school level, and of trying to set up means of meeting their needs and wants. The best of accepted principles of effective instruction in the organization of materials have been incorporated around a relatively few significant centers of important thought. Teachers of home economics should welcome *Today's Clothing* because of its specific adaptation to serve the definite purpose for which it was written, the instruction of senior high school girls.

The book affords evidence that it was written by authors fully competent in their field, from both the point of view of a thorough knowledge of subject matter and sound theory and practice. Their training and experience have qualified them for the work they undertook in writing the book. That their success has been marked is shown by the wide and enthusiastic adoption of the text in its previous editions. *Today's Clothing*, the new revision, has

been carefully and thoughtfully prepared and merits the cordial acceptance of school administrators and home economics teachers. It is a worthy addition to the instructional literature at the senior high school level.

F. V. BERGMAN,
Superintendent of Schools,
Manhattan, Kansas

Preface

The first edition of this textbook was the outgrowth of many years' experience by the authors in teaching clothing courses in senior high school and in working with colleagues in the high school field on the formulation and revision of state courses of study. Through these experiences it has become increasingly clear that cognizance of the difference in learning levels and interest motivation of junior and senior high school students should lead inevitably to a reorganization of the subject matter usually assigned to the high school field, and that such reorganization was the next step to be taken in the interest of effective teaching of various phases of home economics. Based on this conviction, the preparation of this text and its later revisions was undertaken. Subject matter in clothing and textiles is presented on a senior high school level, recognizing that many students in such classes may have already been introduced to certain simple skills at home or at school.

It is hoped that through the presentation of this material attainment of the following aims will be facilitated:

- A. The acquisition by the student of knowledge that will
 - 1. Contribute to a historical background of cultural value.
 - 2. Enrich her appreciation and understanding of social significance of dress.
 - 3. Develop her understanding of the factors which influence the modes in dress.
 - 4. Aid her in determining desirable standards for dress.
 - 5. Contribute to her realization of her responsibility as a buyer.
 - 6. Give her an adequate basis for wise selection of both fabrics and dress.
 - 7. Familiarize her with the necessary steps in garment construction and their relation to the production of a satisfactory garment.

8. Inform her of the care needed to maintain garments made from various fabrics in a satisfactory condition.

B. The presentation of adequate plans designed to give opportunity to apply this knowledge:

1. In the laboratory through the selection of fabrics, the making of garments, and in the care of garments.
2. In the shops and stores through wise selection of fabrics and garments from among those available, and through plans for intelligent expenditure.
3. In the home through detailed work by the student planning and executing her personal wardrobe.

C. The awakening in the student of intelligent interest in the various phases of clothing, in art expression through clothing, in the economic aspects of clothing, including fashion, and in her responsibilities as a consumer buyer. The fostering of a continuing interest in further study in the clothing and textile field is also regarded as important.

The *unit-problem* plan of organization was used in accord with recommended educational practices. The factual material presented for discussion was supplemented by suggestions for the laboratory periods, planned to familiarize the student with problems in the field of fashion and dress.

The wide use of the first two editions of this text has strengthened the authors in their conviction that these established aims are valid and has encouraged them to undertake such revision of the subject matter presented as would seem in keeping with modern educational theory and with the rapid developments in the field of clothing and textiles. The organization of material is the same as was used in the previous editions, namely the unit-problem plan. The problems are suitable in scope for assignments for one or two days' lessons. Each problem closes with suggestions to the class which afford opportunity for further application and study within that area. Reading lists for the pupil are given at the close of each unit. The new edition has been named *Today's Clothing*.

Care has been taken to use a simplified vocabulary except where essential technical terms are introduced, and such terms are always clearly defined.

Illustrations have been freely employed to point up the subject matter of the text and to challenge interest.

As was stated in the first edition, the successful presentation of lessons in the field of clothing and textiles may be greatly facilitated by the development of a departmental file in which illustrative material on woman's dress through the ages may be collected and so organized as to encourage its ready use by class members. A file of used magazines, discarded by homemakers, affords a fine source for clippings of colored pictures and of others showing

fabric patterns, line direction, and other features of dress design. Usually the teacher has no difficulty in obtaining aid from the homes in the establishment of such a file. Neatly stacked, the magazines can be stored in a small space when not needed for classwork.

Still another means of adding to the available illustrative materials is by having a department scrap box to which each pupil may be asked to bring such pieces of fabrics as are readily available at home. If the response from the students is limited, an appeal to the local unit of the Congress of Parents and Teachers or to the Mothers' Club may bring an ample supply of pieces that have been collected from home sewing. When well organized, such a box may add to the interest in classwork.

It is likewise helpful to maintain a file on "consumer facts." From the use of such a file the students become aware of agencies that furnish information to consumers, the specificity and reliability of the information furnished, and the general trends in the consumer education field. Included in this file should be consumers' aids from the following government organizations and agencies:

The Bureau of Human Nutrition and Home Economics, United States Department of Agriculture. A list of available bulletins may be obtained by writing to the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.

The Food and Drug Administration, Federal Security Administration, Washington, D. C. From available free material from this source the students may discover the general lack of protection for the users of cosmetics and toilet articles.

Both current and previous numbers of the *Consumers' Guide* may be obtained on request. It is well illustrated and helpful.

The Bureau of Standards, United States Department of Commerce, Washington, D. C. Printed and mimeographed material is available on buying fabrics by certification that they meet certain specifications. There is also material available on standardization and on aids to over the counter buyers.

The Federal Trade Commission, Washington, D. C. Material is available on wool and rayon labeling.

The following acknowledgment is made for aid in preparing this book:

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To the teaching staff of Manhattan High School, from whose outlines we have gleaned much.

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THE AUTHORS

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Section One

THE GIRL AND HER
CLOTHING



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The typical American girl.

1

The Girl Herself

If you were asked to describe a typical Mexican girl, you might reply eagerly, "Oh, a Mexican girl has brown eyes and black hair, with sun-tanned skin; she is graceful and swaying in her movements, yet quick." If you were asked to sketch, with words, the picture of a Swedish girl, you would perhaps say, "A Swedish girl is blonde. She has heavy braids of taffy-colored hair, eyes as blue as forget-me-nots, a fresh, rosy skin, and a straight, strong body, fit for strenuous work or play. She is direct, straightforward, and fearless." Questions might lead you to put in a few words your ideas of girls of many lands. You would find that you have certain ideas, gained perhaps you do not know how, of the physical and mental characteristics of many faraway peoples. If the questioner came closer home and asked you to describe an American girl, it is quite possible that you would hesitate and say, "Well, I am not sure—." Many girls, different in type, in coloring, and in interest may come to your mind. There may be Maria Theresa from the Mexican community, sturdy Gretchen Ohlson, daughter of a farmer born in Denmark, and slender Elizabeth Carter from Virginia—all Americans, and all so different that they make efforts at description difficult.

1. What is the typical American girl like?

Since America is made up of many people from many lands with varied inheritances as to color of skin, hair, and eyes, we cannot expect to be able to describe the physical appearance of an American in the same way you have done with the girls from certain lands. We can,

however, consider certain broader physical and mental characteristics that we have reason to believe are common.

Physical appearance. The typical American girl should have a strong body. She comes from a land of abundance where stress is given to the importance of bodily health. The variety of available foods is great; the cost is low so that good food is a common birthright of the American girl. Nor is this all. Information as to what to eat for vigorous health is readily available to everyone. In the classroom and through newspapers, magazines, and other channels the American girl has come to know the food rules that direct her to good food habits.

She knows, too, that rest, sleep, and relaxation are important in building and keeping health. Fatigue, high nervous tension, and brittle tempers are recognized as enemies to be combated by good health habits. Again and again she has heard regular exercise in the open air and sunshine stressed as an important health measure; so she has keen interest in athletics, sports, hiking, swimming, and tennis. If you look at the members of your class, you may find that there are small girls and tall girls, plump girls and lanky girls, and others who are just average girls. The average girl is one whose measurements and proportions in the main agree with those that investigations have shown to be most common. In general the average American girl has measurements about as follows:

Height	5'4"	Hip	38"
Weight	120 lbs.	Neck to waist	
Chest width	14"	Center front	12.5"
Width of back	14"	Center back	14.5"
Shoulder-line	4.5"	Waist to floor	
Bust	35"	Center front	41.0"
Waist	28"	Center back	41.5"

She tends to be taller, broader, and heavier than the American girl of a century ago. Doubtless this is because present knowledge of health is more adequate and healthful living is more common.

Mental characteristics. We have considered chiefly the physical characteristics of the American girl. Important as these are, they are only part of her pattern. There are certain mental and emotional char-

acteristics that should be hers. Because she is an American, she is privileged to share in the life of a great and wonderful land. She has spent her childhood free from fear of invading armies and the horrors that come in their wake. She has opportunity to share in the great experiment of democracy. Someone has said that being an American means sharing in promises: the promise of a share in the nation's wealth, in return for sharing in its work, and the promises of freedom, security, human dignity, and happiness. The last of these promises matter more to each of us today than our hope for material possessions. We all want to be free to grow so as to become what we have the promise of being. The American girl has this urge, as have all Americans. She expects to do something that will contribute to the community of which she is a part. Perhaps she will be a teacher, a nurse, a stenographer, or a dietitian. She wants to share in the world's work and rejoices that she is free to choose the sort of work which she will do. Perhaps she is somewhat more vague as to what she may do to make democracy secure, but she feels deeply her wish that each person may be considered as an individual of worth, meant to be free and to share in certain basic rights, dear to us all.

The thinking that lies back of being an American cannot help but influence the expression of the face, the manner of holding the body, and the sense of forcefulness of the individual. A person who knows human dignity and personal happiness, who feels secure and expects justice will appear very much different from one who feels fearful, degraded, and hunted. So the promises and hopes of America that belong to the high school girl are among the forces that mold and shape her in a very definite way.

This is not all. There are certain matters that seem important to the high school girl. As a woman-to-be, she has a basic concern with human life, its care and protection, its enrichment and fulfillment. Mary Beard, writing in *America Through Woman's Eyes*, states, "So it would seem, if there is in all history any . . . force, that force is woman—continuer, protector, preserver of life, instinctive, active, thoughtful, ever bringing thought back . . . to the center of life and work."¹

The American girl, then, is fortunate to have the responsibilities of being an American, sharing in the richest promises the world has known, and of becoming a woman who may determine the worth of the civilization her country will have.

¹ Beard, Mary. *America Through Woman's Eyes*, p. 7. The Macmillan Company, New York, 1934.

SUGGESTIONS TO THE CLASS

1. Choose from the community a woman whom you believe to be a typical member. Describe her, relating details of characteristics that you believe to be typically American and those that you regard as distinctly womanly.

2. Choose some American woman from past history who you believe has made a real contribution to her time. Write a paragraph of description of her and her activities to be read to the class.

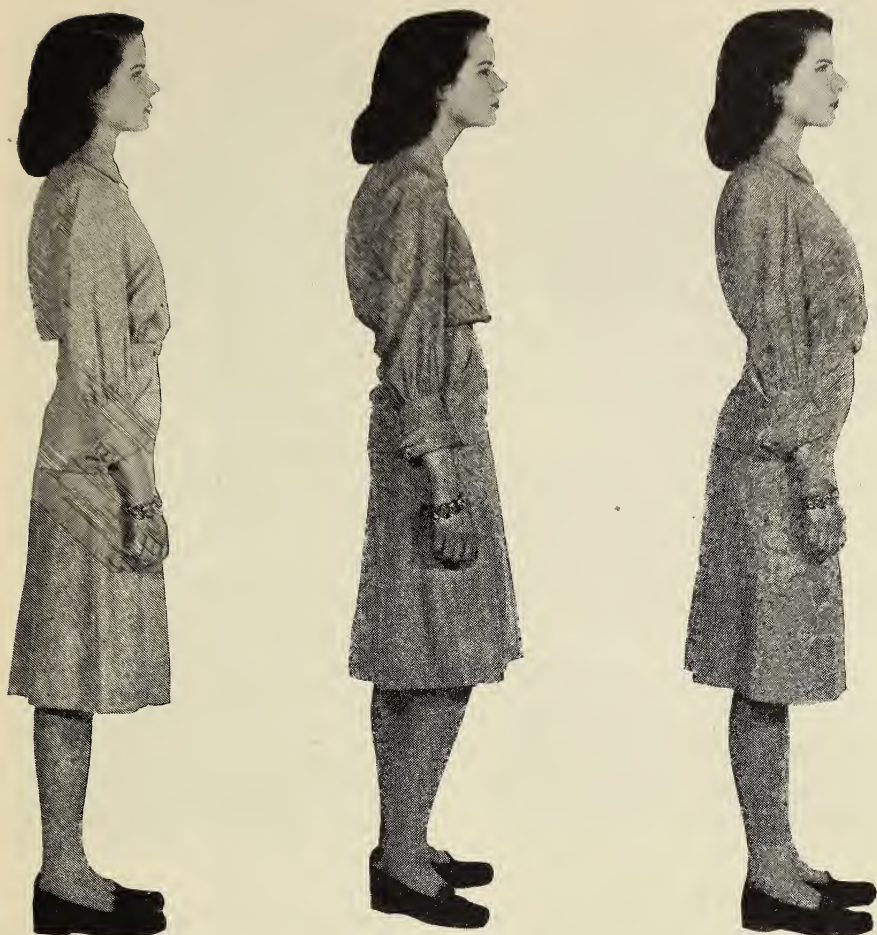
3. Take the measurements of the members of the class following those listed on page 4. How near are the average measurements for your group to the ones given? How wide are the variations shown in the figures for the class?

4. Ask five people what it means to them to be an American. Record their replies, grouping like responses together. What are the most commonly given answers?

2. *How should an American girl carry herself?*

An old Southern horse trainer was heard once, crooning to the colt he was grooming for a brilliant showing on the racetrack. His message was, "Honey, you ain't nobody's chile. You—youse *somebody's* chile. Now, honey chile, carry yourself proud." As we think of the many advantages and promises that belong to the American girl and to all Americans, it would seem quite right and proper to say, "Now, honey chile, carry yourself proud!" Such words would surely bring as a response from some girl, "Yes, but how?" The old answer on how to carry oneself well was to *think tall*, *stand tall*, and *walk tall*—as tall as one possibly can.

Balance. In standing, the chest should be held high and arched, the head erect with chin up and in, the shoulders even and level, and the abdomen in and up. The arms should hang loosely from the shoulders as if ready to swing in time with the rhythm of your motion in walking. The weight of the body should be balanced equally upon the ball and the outer side of the foot. The feet should be parallel with toes pointed straight ahead. The position should be easy, without apparent stress or tension. A soldier is told that he has a vertical weight line that passes through the middle of his pelvis. He carries his body weight poised on this line, keeping it from shifting either forward or back. This requires a straight spine which helps make the man "walk proud." If you have



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These pictures illustrate standing "proud" and some sad variations. *Left:* The vertical line falls straight and true. *Center:* The vertical line curves in a tired way. *Right:* The vertical line bulges in an ugly manner.

difficulty in locating your weight line, here are a couple of other cues that may be useful. A straight line, if dropped from the ear, should pass through the middle of the shoulder, hip, knee, and ankle. You may think of yourself as being four stories high—feet, hips, chest, and head—all well balanced in true architectural style.

Many high school girls find support for erect carriage in foundation garments which are properly chosen and fitted. A well-fitted garment contributes to good balance and good posture, supports muscles under strain from exercise and fatigue, and molds the bust, abdomen, and



Good Housekeeping Institute

Sitting proud and pretty is an art. *Left:* There is a pleasing line from top to toe. *Right:* There is a poor line from top to toe.

hips to give a trim, well-dressed look. For the young figure, still not fully formed, a bandeau brassiere and flexible panty girdle will be suitable and easily fitted. The girl with more nearly adult proportions will need a brassiere giving somewhat greater support, and a girdle that is lightly boned for greater control and support. The chunky girl may need an all-in-one garment to provide a smooth base for frocks and to eliminate the unsightly "roll" of fat around the waistline.

Walking. There should be an easy, rhythmic flow of forward motion in our walking. For many people it is a waddle or an effort at pushing a reluctant body along. Unless we try to walk gracefully, we may find that our natural gait is inefficient and awkward. Since we all do a great deal of walking, let us learn to walk well. Skill in walking can be learned, just as one can learn to drive a tennis ball or to follow a certain stroke in swimming.

The first step toward graceful walking is learning to stand and to sit gracefully. If you are able to stand with your back so well pressed to the wall that there are few openings between the wall and your head, neck, shoulders, backbone, buttocks, thighs, calves, and heels, you have no curves to catch and hold tiredness. If you pull yourself tall and even, in order to balance a book on your head, you have accomplished the same purpose. Straightening up is an important first step in learning to walk well. Then you should arch your chest and carry the weight of your



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Top left: Rising on the toes, then lowering the heels on the floor, when repeated several times, is a good foot exercise. *Top right:* Curling the toes over the edge of the stairstep, then relaxing, is a good exercise for the arch of the foot. *Bottom left:* Well-cared-for feet. *Bottom right:* A frequent massage with cold cream prevents the skin chapping at the heel.

body with you as you go forward, rather than dragging it after you. The weight of the body should never be carried on the heels but on the balls of the feet. Learn to walk briskly, with steps of even length. Sauntering and dilly-dallying on the way are sure means of developing fatigue.

The feet. Much of the pleasure in walking and the possibility of walking gracefully depends upon the health and good condition of the feet. The foot is sometimes described as a strung bow, with the bow uppermost. It is a flexible living structure of twenty-six bones held together by muscles and ligaments forming two arches, the inner spring arch that cushions the foot and the outer weight-bearing arch that carries the

load. The spring arch is made up of three long bones connected with the short bones of the great, second, and third toes and the small bones directly back of these toes. The weight-bearing arch is made up of two long bones connected with the short bones of the fourth and fifth toes and a small bone lying back of these toe bones. If the individual forces the spring arch to take up the load of supporting body weight, a strain may result that is almost severe enough to cripple him. Such conditions may be brought about by wearing ill-fitting shoes, by faulty walking habits, and sometimes by poor muscle tone.

It is important that shoes be selected that are planned to fit the architecture of the foot and that will help with its work of forward movement. The well-fitted shoe will exert no pressure on the foot. It will give support without interfering with full and free activity of the foot muscles. The shoe should extend from one-half to three-fourths inch beyond the end of the great toe. The ball of the foot should lie over the widest part of the shoe. There should be no pressure on the tops of the toes, nor should these be shoved or pushed into unnatural positions. The shoe should be the same width as the foot. The heel should fit snugly so the shoe will not slip, causing blistering or cutting of the heel tendon, when the foot is raised. A heel $1\frac{1}{4}$ or $1\frac{1}{2}$ inches high with ample base and tread is found to give good support and to be well suited for walking shoes. Such shoes need not be clumsy nor heavy and ugly. They may be selected with the moccasin toe or with a square, boxed toe, and they come in a variety of colors and weights of leather. Thought given first to a good fit and then to a satisfying color scheme may bring rich rewards in the personal comfort necessary for pleasurable walking.

We have said that the bones of the foot are joined in the form of an arch to bear the weight of the body. A shoe with a fairly broad, moderate heel supports this arch without strain. When high heels are worn, the weight is thrown forward onto the toes, so that the body weight does not rest on this arch as it should, but on the forward end of the spring arch and on the toes. This throws the entire body forward, beyond the line of body balance, so that muscles in the back, neck, and legs are kept under constant strain to keep the body balanced. When high heels are worn constantly, the result is tired feet and muscle strain. Often corns or callouses develop, and eventually there is serious injury to the arch of the foot.

Good taste warns you that a chiffon party dress is not suitable for a school room. Similarly, good taste and common sense say that sturdy, comfortable oxfords are suitable shoes for school wear. Slippers of

lighter weight with finer detail and with higher heels are good for dress occasions. But extremely high, or spike heels are never appropriate for a high school girl. With slacks, only flat or wedge heels look well.

With the present trend toward sandals and footwear made largely of thongs or cords, worn without stockings, the wearer is faced with the fact that feet thus exposed will become dirty very quickly, and therefore will require extra care. Feet on display in open sandals must be kept in show condition—scrupulously clean, free from corns and callouses, and with nails neatly trimmed—or they will defeat your efforts toward being well groomed.

SUGGESTIONS TO THE CLASS

1. Stand as you are accustomed to do. Have your height taken. Then stand tall, pushing out every curve and hollow in your back. Have your height taken. What difference, if any, is there?

2. Try to walk as a proud lady; as a frightened child; as a discouraged old woman; as a soldier. What lines were typical of each characterization? What caused you to select the characteristics that you did in each case?

3. Study the standing and walking postures of members of the class. What strong points did you find, such as good positions of shoulders, proper architectural arrangement of the four stories of the body, and proper position of feet? What were some common weaknesses?

4. Measure your foot. Standing with full weight on a piece of paper, draw an outline of your foot, holding the pencil perpendicular to the paper. Measure the drawing for length and width. Cut it out and try it on the soles of shoes of various lasts in that size to determine which last most nearly is adapted to your foot.

5. Removing shoes and stockings, try two or three of the following exercises, recommended as a means of improving foot health: (a) Try to pick up marbles with the toes, placing them in the hand on the opposite side at the knee level. (b) Walk on two parallel lines; step; grip the floor with your toes, and then push off with your toes; relax; repeat. (c) Pat-a-cake, clapping the soles of the feet without bending the knees while sitting on a bench with legs straight in front of you and well off the floor. (d) Place a towel on the floor. Sit with heels on the floor and toes just on the edge of the towel. By holding the heel steady and working and crumpling the towel with the toes and fore part of the foot, work it back under the foot.

6. From magazines available in your home or in the classroom select pictures of shoes which you regard as suitable for the following activities: school, tennis, hiking, beach wear, dress, a formal party.

3. *What attention should she give to her skin?*

Cleanliness is essential to being well groomed. This applies to the person as well as to the garments worn. The need for the daily bath and the daily care to be given the skin and nails have probably been covered in junior high school courses in clothing or hygiene. You may have read articles in newspapers or magazines on this subject. However, a review of the subject at this point might be helpful.

The bath. Important in the care of the skin is the removal of the perspiration and the oil secreted by glands in the skin. Then, too, the skin should be freed of the dirt and grime brought to it by contact with the air, the hands, the scarf, and other articles. Cleansing the skin is best done in a bath of warm water—70° to 90° Fahrenheit—made sudsy by the use of a mild soap. The lather should be rubbed on the body with your *own* washcloth, and your body should be dried with your *own* towel. If the conveniences of your home make it possible, a daily tub bath is desirable. If this is not possible, one can keep fresh and dainty by taking a daily sponge bath and such tub baths as can be arranged. Thoroughness in bathing has been described by one youngster as “the high and low of it”—high behind the ears and low between the toes! A bath brush with a handle and bristles not too harsh, makes possible thorough scrubbing of the back and shoulders.

After the cleansing, sudsy, warm bath, a shower or quick rinse in cool water is desirable to close the pores of the skin and give the body a “toning up.” Vigorous rubbing with a coarse towel adds to the sense of well-being.

Deodorants may be applied sparingly to the armpits or other parts of the body to prevent unpleasant body odors. Their use has come to be an accepted part of the daily program of personal care.

In addition to the all-over bath, each of us needs to wash the face at least twice daily. Use warm, soapy water for cleansing, and follow with a cool rinse. If the skin is dry or chafed, a cold cream may be used to soften and soothe it.

For the high school girl, there is little need for using the many “beauty aids” commonly on display in drugstores. These “aids” include creams to make face powder stay on, face powder to remove shine, rouge to give the skin the desired color, and lipstick to accent the lines and shape of the mouth. Wise users employ such aids only to emphasize what nature has provided. When an individual goes contrary to nature

in the use of colors in make-up, she is likely to destroy all possibility of charm in her face. Overrosy cheeks or an overemphasized mouth tends to dwarf the eyes and destroy the balance of the face. Make-up, if used at all, should be employed to bring out the natural coloring, not to create a different person. If in doubt as to what color of rouge and lipstick is becoming and the quantities of each that you can wear, stand in front of a mirror in broad daylight or in strong artificial light, and experiment with shades and tones to find the ones that are most flattering to you. Keep yourself critical of the result.

It is a mistake to assume that expensive cosmetics are necessary for good results. Many excellent preparations are marketed inexpensively. One need not waste money on fancy packaging to meet adequately all toilet needs.

SUGGESTIONS TO THE CLASS

1. Make a schedule showing time required for the daily care of your body; for the weekly care.
2. Make a chart showing the color of powder, rouge, and lipstick you should use, using water-color paints or circles of colored paper.
3. Suppose you are in need of all new cosmetics. List what you would buy, giving quantity and the price of each article. Find the average cost per week of such cosmetics for class members.
4. The average cost of Jane's cosmetics is twice that of Mary's. Suggest three reasons why this may be true.
5. Check three soaps; decide which one is best. Give the reasons for your choice.

4. What particular care do hands and nails require?

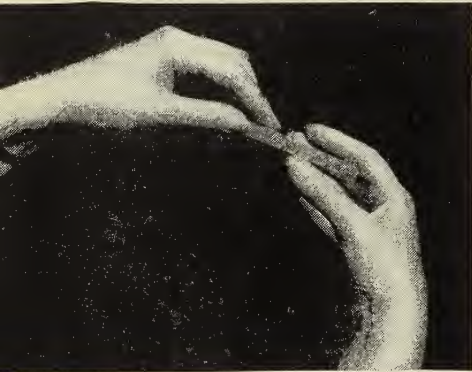
To wash the hands thoroughly, wet them, apply enough soap to work up a good lather, and then rub the two hands together. A small hand-brush should be used frequently to scrub around and under the nails where dirt is likely to gather. When the hands are clean, rinse them in clean water and dry them on a clean towel. Follow the scrubbing by cleaning under the nail tips with an orange stick or nail file.

Frequent washing to insure cleanliness tends to remove the natural oils, leaving the skin dry and harsh, and paving the way for a bad case of chapping. To prevent chapping and hangnails, it is necessary that the oil be restored. There are many effective and inexpensive hand lotions



CARE OF . . .

1. The last trace of the last application of finger-nail lacquer should be removed before beginning a manicure.



2. The nails are next filed with an emery board to the desired shape. Good taste suggests that one avoid exaggeration either in length or in the formation of too-pointed nails. Do not file into the corners if you would prevent callouses.



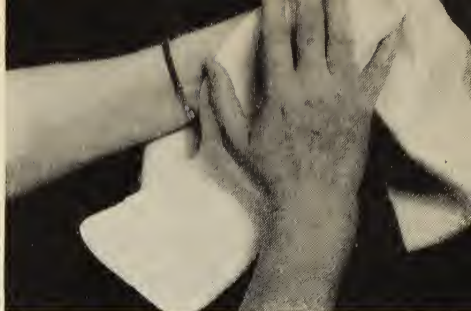
3. The nails are soaked in warm, slightly soapy water to soften the cuticle.



4. An orangewood stick is used to loosen the cuticle from the nail. To free the nail of all traces of cuticle, push it back with the flat end of the stick. Press gently so as to avoid the formation of white spots.

. . . THE HANDS

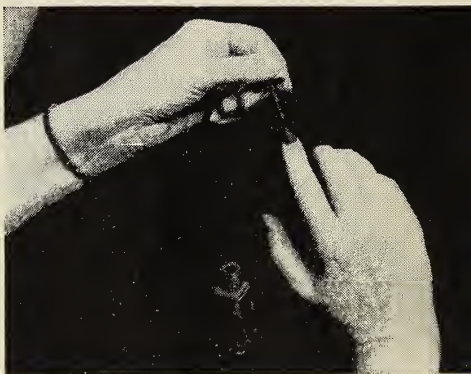
5. The nails are dried thoroughly before applying the lacquer. Give special attention to the corners of each nail so as to wipe away any free cuticle.



6. Gentle buffing before the application of lacquer smoothes the nail and assures a smoother finish. Avoid harsh abrasives and too-vigorous buffing.



7. The application of lacquer is made with quick, bold strokes. A full brush usually results in a smoother finish than to attempt it with a scanty amount. Two coats will give a deeper color and a more glossy finish.



8. Before the lacquer is set, wipe the tip of the nail with the ball of the finger so as to bevel the edge and thus avoid chipping. Wipe from the base of the nail forward on each side. Clean around the cuticle with a cotton-tipped orange-wood stick dampened in polish remover. Allow polish to dry thoroughly.



on the market that will serve to keep the hands soft if applied regularly after each washing.

For a complete home manicure, the following equipment is necessary: a small bowl of soapy water, a nail brush, an orange stick, a nail file, a pair of manicure scissors, and an emery board. A well-polished, nicely shaped nail with deep moons at the base is the desired goal in manicuring.

Begin the manicure by washing the hands. Shape the nails of both hands with the file and smooth them with the emery board. Do not shape the nails too deep at the corners, as this causes ugly corners and sometimes results in ingrown nails. Next, soak the finger tips in a bowl of soapy water to loosen the cuticle so that it can be pushed back to reveal the moons at the base of the nails. The pushing is done with the blunt end of an orange stick covered with cotton. After the pushing has been done, pass the soapy brush over the finger tips, rinse and dry the hands. Now is the time to remove the hangnails and loosened cuticle with clippers or scissors, being careful not to cut into the skin. Rinse the hands and thoroughly dry them.

The manicure may be completed either by using a buffer to give a glow to the nails or by applying a liquid polish. Finally, use a small amount of hand lotion to keep the skin soft, and work it in around the cuticle. Lotion prevents drying of liquid polish, so it must be used after the polish, if any, is applied.

If, like many girls, you find that it is hard to "do" your right hand, you will be glad to exchange help with another girl for this part of the manicure.

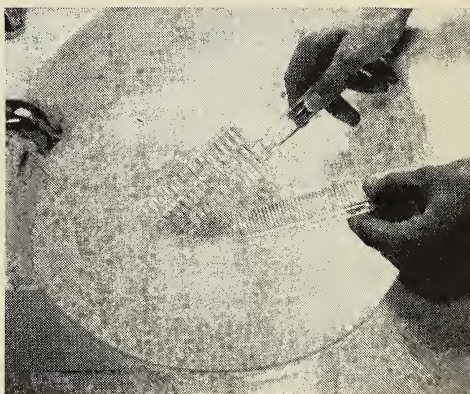
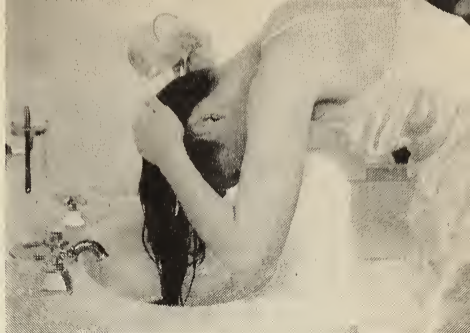
Infection around the corners and base of the nails is always dangerous. Everything used for the manicure must be perfectly clean. Scissors should be boiled or wiped with alcohol, and orange sticks should be wrapped in sterile cotton. Most states have strict laws requiring professional manicurists to use sterilized instruments and materials to guard against infection.

SUGGESTIONS TO THE CLASS

1. Choose two girls in the class to give a demonstration of the home manicure.

2. Write a paragraph stating your opinion of the use of colored polish for the finger nails and toe nails, and what colors of polish you would select for yourself.

3. Give yourself a manicure, following procedure suggested.



McCall Corporation

These are the six steps in a home shampoo:

Top left: (1) Brush the hair thoroughly.

Top right: (2) Wet the hair thoroughly and apply a soap solution or a prepared shampoo.

Center left: (3) Rub the scalp vigorously. A rich lather is produced, covering the scalp and hair.

Center right: (4) Rinse the hair well and partially dry with a towel.

Bottom left: (5) Straighten the damp hair with a comb and make pin curls.

Bottom right: (6) The comb and brush deserve regular shampoos too.

4. Give yourself a pedicure, following procedure suggested for a manicure.

5. What care does hair require?

"Fifty strokes, my dear, fifty full strokes." Thus was the girl of a half century ago directed about the brushing she was to give her hair morning and evening. Brushing was necessary to keep the long strands free from dust and dirt and gleaming with vitality and health. The emphasis on a full stroke is not so necessary in these days of short hair, but brushing is still necessary to proper care of the hair and scalp. A good stiff-bristled brush and a coarse well-toothed comb, kept clean by a weekly washing, are needed for the job.

Even well-brushed hair needs shampooing either once a week, or once in two weeks, depending on its condition. Oily hair requires more frequent shampooing. If one has short hair, a shampoo may easily be given at home. It will be found helpful to make a soap jelly, or liquid shampoo, before starting to wash the hair. Enough for several shampoos may be made by shaving half a bar of a mild soap into a pan or porcelain bowl, covering the shavings with three cups of warm water, and cooking slowly until the soap has fully dissolved. The hair should be dipped in clear, warm water, and then the liquid shampoo should be applied to the wet scalp in small amounts as necessary to create a heavy suds on the hair and scalp. Rub the scalp gently but firmly to loosen any dirt present. Rinse and repeat this process until the hair and scalp are clean. Then rinse through several waters to remove every trace of soap. Each rinse water may be somewhat cooler than the preceding one. The last should be fairly cool and should remain clear and free from soap after the hair has been rinsed in it. The hair is then rubbed dry with a bath towel in the sunlight and air if conditions permit.

If you wish a "set" wave in your hair, you may set it yourself or you may find it more fun to pair off with another girl and do each other's hair. Have the hair damp, rewetting each strand as it becomes dry. Wave lotion may be used if the hair does not hold the curl well.

First, carefully make the part in the hair, if there is one. Then, with the style of hairdress in mind, take small strands of hair at a time, wrap them around the tip of the finger, and pin them securely with bobby pins. The curls that are to be combed off the face should be turned backward around the finger. If they are to be combed forward for bangs they should be wrapped forward. Larger strands, or looser wrapping around the finger, will produce looser waves or curls.

SUGGESTIONS TO THE CLASS

1. Invite to your class someone who will demonstrate for you how to shampoo the hair.
2. Estimate the cost of personal upkeep for one year if you pay weekly for the service of having your hair shampooed and if you perform this service yourself.
3. Study some pictures of hair styles of other years. Prepare a comparison of these styles with your own hair arrangement, stressing ease of arrangement and shampooing and comfort.
4. On a blank such as the following one estimate the cost of personal grooming and care of clothes for a year. Upon which items do you have definite information? Estimate the reduction in costs through self-service in personal care, and look up possibilities in homemade supplies.

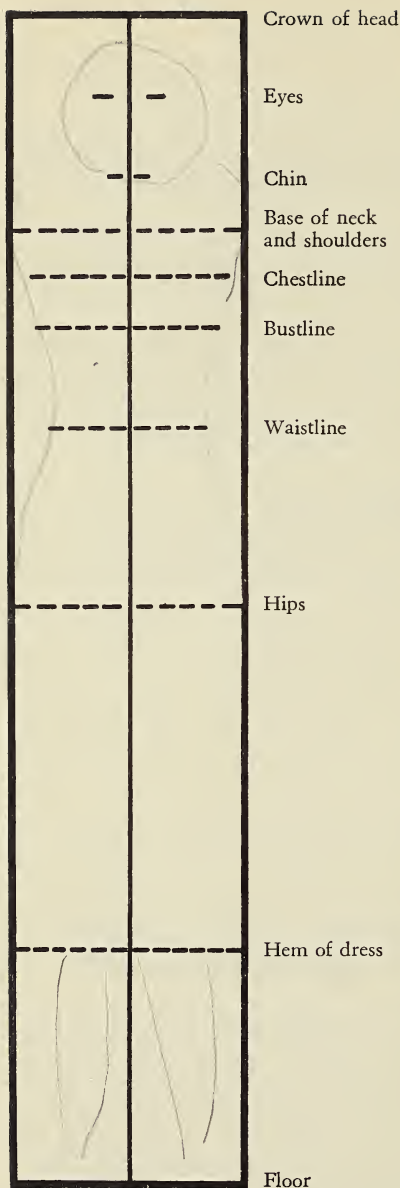
THE COST OF PERSONAL CARE

ITEMS OF EXPENDITURE	AMOUNT SPENT
1. Cosmetics, toilet articles	
2. Care of hair	
A. Permanents	
B. Hair trim	
C. Shampoos and sets	
3. Manicures	
4. Sanitary goods	
5. Shoe repair	
6. Laundry	
7. Dry cleaning	
TOTAL	

6. How may the high school girl use self-appraisal for her own improvement?

Appraisal is a term applied by bankers and other businessmen in estimating the worth of material possessions, such as a building, a lot, or bonds. In appraising the worth or value of a lot, for example, its size is determined, and consideration is given the character of the soil, the contour or lay of the land, and any special attraction, such as beautiful trees and shrubs or a beautiful view. Appraisal by owners is usually not accepted because their interest in the matter is so great that their judgment is likely to be biased, colored by their wishes, and influenced by personal advantages. Competent, disinterested judges experienced in appraisal are consulted, and their appraisal is accepted without question.

Importance of self-appraisal. Such assistance is rarely available to the girl who desires appraisal of herself. She will find few people whose



This diagram shows the basic structural lines of the figure.

interest, information, and appreciation fit them to serve as appraisers. She will find many people whose kindness interferes with the honesty of their comments, leading them to use flattery to blunt the edge of truth so that no hurt will be felt from their statements. She will find others whose concern with detail is so great that they are unable to see significant values. And she will find still others who are unkind and eager to exaggerate minor defects. Often shyness prevents the girl from seeking appraisal by those whose judgment she values most. Self-appraisal becomes important, then, as a means of determining one's characteristics. It is not easy, for it requires an impersonal attitude toward oneself.

To think impersonally really means standing off in the mind's eye and seeing oneself just as one sees others, without fear or favor, and accepting the verdict without glossing it over or contradicting it. Can you look at yourself impersonally? Suppose you try! Very well, what will you see first? Your physical self! You will become aware, without denial or resentment, of the character of your body rectangle. This knowledge is important to you because it determines the line direction that will be becoming to you, the space divisions that will be pleasing in

dress designs, and even the fabric design that will be in harmony.

Appraisal on this point having been made, the *facts as found* should be considered whenever a dress or dress design must be chosen. You should then study the proportions of your body and the lines given

your figure by your posture, mannerisms, or poses. Are your shoulders too narrow or too broad to be in good proportion to the rest of your body? Are your hips large, or is your waistline thick? Are you stoop-shouldered or sway-backed?

Some of the faults that you find in your line direction and body rectangle may be things that you cannot change. If your shoulders are too narrow or too broad for the rest of your body, you cannot change this basic fact, but you can make it less evident by wise choice of dress and accessories. Defects in the body rectangle due to posture faults such as stoop shoulders or a sway back may be corrected by persistent care and exercise. But until you do correct such defects, it is necessary to take them into consideration in a frank appraisal for determining becoming dress design.

If your problem in proportion is due to being overweight, this also is a matter to be viewed impersonally in determining line direction and fabric design that will be becoming to you. A great deal of emphasis is being placed nowadays on the matter of diet to control body weight. Pills and tablets, rigorous exercises, and odd plans for diet have all been urged upon those who wish to lose weight. Most of these are useless for weight control. Many of them are really harmful. For most high school girls, a simple, well-rounded diet will produce a normal, healthy body. For the girl who is definitely overweight, common sense is the best means of weight control. The chubby girl has a good chance to gain the trim figure she desires when she learns to say "No, thank you" to all offers of second helpings at the table, can consistently pass up rich desserts, and can choose an apple instead of a double chocolate sundae for an after-school snack.

Consideration must be given these things in any choice of a dress or dress design made on the basis of your self-appraisal.

Your coloring. Next, study your personal coloring—that is the color of your skin, your hair, your eyes, and your lips. Perhaps you will say in a shocked voice that your skin is white. Your skin may be creamy, rosy, or even sallow; but never, even in the case of a fainting person, is it white. If the skin is sallow, yellows should not be chosen because they tend to intensify the color of the skin; if the face is florid, reds and pinks should not be worn for the same reason. If a pallor is apparent in the skin, dark hues should be avoided because they tend to take color from the face; and grays, strong blues, violet, and green are to be avoided because they tend to accent the gray bluish-violet cast that is so often found in pallor. Your appraisal of your coloring, then, should show you

the colors that are becoming to you. It should also enable you to apply the principles of color harmony which you will study so that your decisions concerning clothes may yield you real satisfaction.

Differences in color of hair are more readily evident than differences in skin tones and color of lips. You may be blonde, golden, flaxen, or ashen-haired, with brown, blue, or hazel eyes; auburn-haired with brown or blue eyes; or red-haired with brown or blue eyes. Although color of hair does influence the wise choice of colors for clothes, consideration of skin tone is of greater importance.

Further self-appraisal. When you have studied your physical frame until its characteristics are firmly impressed on your memory so that you will not mistake yourself for anyone else—not even a favorite movie star—you still have not completed your appraisal. You need also to know what your social characteristics are so that your choice of clothes will reveal respect for your personality. Are you lively and sparkling or reserved and shy? Are you athletic and independent or frail and dependent? Sometimes one sees a shy, retiring girl in a dress which overwhelms her personality, or an athletic girl, energetic in her motions, whose dress suggests a costume of the 1880's when women were inactive, dependent, and frail. The lack of harmony of such dresses with the characteristics of their wearers indicates the need for appraisal of one's personality. The list on the next two pages has been suggested as a basis for self-appraisal.

Will you rate yourself according to this score card, remembering to make your judgments impersonal?

Score Card for Self-Appraisal

	<i>Points</i>	<i>Score</i>
1. Hair	5	
Glossy and free from oil; not dry and brittle		
2. Eyes	5	
Bright, sparkling, alert, not dull and heavy	(2)	
Not strained, no puckery lines or frowns	(1)	
Clear white of eye, not muddy or yellow	(2)	
3. Mouth	5	
Pleasing expression	(2)	
No mouth breathing	(3)	
4. Teeth	5	
Well cared for	(3)	
Good apposition (teeth meet properly)	(2)	

5. Skin	10
Clear, without eruptions	(2)
Good color, not anemic	(2)
Moist and smooth, not scaly and dry	(1)
Tissues firm and elastic, not flabby or saggy	(2)
Skin under eyes smooth and clear, not dark and baggy	(2)
Lips naturally red	(1)
6. Hands	5
Skin immaculately clean; smooth, without abrasions or cuts	(3)
Nails and cuticle clear and carefully cared for (no extremes)	(2)
7. Feet	5
Normal and well shaped; shoes worn evenly on heel and sole	(3)
Feet properly shod	(2)
8. Posture—graceful carriage	10
Head well poised	(1)
Shoulders level (one not higher than other)	(1)
Graceful body, line unbroken by abdomen, chest high	(1)
Feet in good position—slightly apart and parallel ..	(1)
Arms in graceful relaxation; good lines and grace while seated	(1)
Lower spine against chair back	(1)
Knees almost touching each other	(1)
Feet parallel or one crossed over other when seated ..	(1)
Harmony of movement while walking, an elastic step—firm, not heavy	(1)
Good rhythm of entire body	(1)
9. Body rectangle	15
Well proportioned, pleasing line direction	(7½)
Correct weight for age and height	(7½)
10. Good balance and symmetry	10
In the relation of body parts, as both shoulders same height, any one part well related to rest of body, waist not thick	(5)
Back lines straight and good, free from stoop and sway	(5)
11. Vision and hearing	10
Good vision	(5)
Good hearing	(5)

12. The all-important first impression	15	
Radiating good health and spirits (full of enthusiasm and interest—magnetic)	(5)	
Poise (a perfect control of self, often inspiring others with confidence)	(5)	
Voice (the depth, the warmth, the enthusiasm, the force of your personality should speak through your voice)	(5)	
	TOTAL	100 <u> </u>

SUGGESTIONS TO THE CLASS

1. Evaluate yourself according to the basis suggested in the text.
2. By reviewing the facts of nutrition theory find at how many points in the schedule for evaluating personal appearance there is evidence that optimum diet as regards vitamin and mineral elements gives a basis for improvement of physical health and personal characteristics. The class may wish to secure a diet-scoring device and check their individual diets.
3. Have some member of the class determine your exact height in inches; also your width. Allowing 1 inch to equal 8 inches, draw a rectangle that represents your height-width relations.
4. Similarly, construct a rectangle that represents your proportions viewed from the side. Compare the rectangles you have drawn with those of other members of your class.
5. How will the proportions revealed affect your choice in dress design?

SUMMARY

The American girl is fortunate in that she is aware of the importance of right diet to her good health. For the most part, the food she knows she needs is readily available, awaiting her choice. She is informed as to the importance of rest, exercise, and relaxation. She finds that the industrial civilization in which she shares makes desirable provisions for needed rest and affords time for recreative exercise and pleasant relaxation. She has as her greatest heritage certain assurances that, while they are not yet fully realized, give her hope that women in this country, as well as men, may reach their full development as persons, with freedom to think, to believe, to speak, and to hold that which is their own. This brings to her certain obligations for becoming all that which she holds the promise of achieving. She must build a healthy body, walk as becomes a girl in a land where every woman is a queen, and so attend to matters of posture and grooming that she appears as she is: a person of rank and discrimination.

The art of good grooming may be acquired by anyone who is willing to give thought to the principles involved and is ready to make the expenditure not only of money but also of time and effort. Inasmuch as this art is largely made up of sets of habits and sets of values, progress in it is often slow, depending upon the interest of the individual in the problems involved and her continued experience in their solution.

The importance of self-appraisal in planning for growth cannot be overstressed. Such effort should make us less self-conscious, instead of more, and may be made to contribute to our impersonal attitude toward life. This appraisal may be revised according to the points brought out in class discussion. Important in such appraisal is consideration of mental as well as physical characteristics, because the whole of the individual is what should be expressed through her living.

2

Expressing Beauty in Our Clothes

Have you ever heard the remark, "She makes a perfect picture in that dress"? Doubtless as the words were spoken you turned to see the girl or woman whose appearance had caused such enthusiastic comment. If you, too, found the effect satisfying, you felt that just through seeing something of beauty and charm your world was somehow brighter and more pleasing than it had been before. It is possible for people to add to the landscape rather than to detract from it if they so desire. However, ability to make this contribution to one's own satisfaction and to that of others is neither a gift nor an accident. Neither does it depend upon having lots of money to spend on clothes or on being in a large shopping center to purchase them. Of course these may be helpful, but they are not major items in your success in planning your own clothes. You can express beauty in dress quite well and can have fun in doing it if you are willing to make the effort. But it will take effort.

There are certain things that you must understand before you begin. You must see that a dress design, like any other design, is an orderly arrangement of lines, shapes or forms, textures, and colors. These are the elements or the ingredients out of which your design is to be made. You will need to understand the meanings that different lines, shapes, colors, and textures have come to have for people. Wide reading, critical observation, the study of paintings, and thoughtful consideration of artistic films all prove helpful in developing such understanding and appreciation. Your next concern will be to master the rules of arrangement so that you may use line, form, texture, and color most satisfyingly in whatever design you choose to make. In these various ways you will be establishing standards of good taste to guide you in designing. Then



Good Housekeeping Institute



These pictures illustrate body lines in action. Head up is still a good rule.



Good Housekeeping Institute

This picture illustrates a study in terminal line direction. Knees together and feet on the floor constitutes a good terminal arrangement.

you will need directed experience to give you skill in choosing and creating designs. With such preparation as this, you can turn to the matter of planning your clothes with pleasurable assurance.

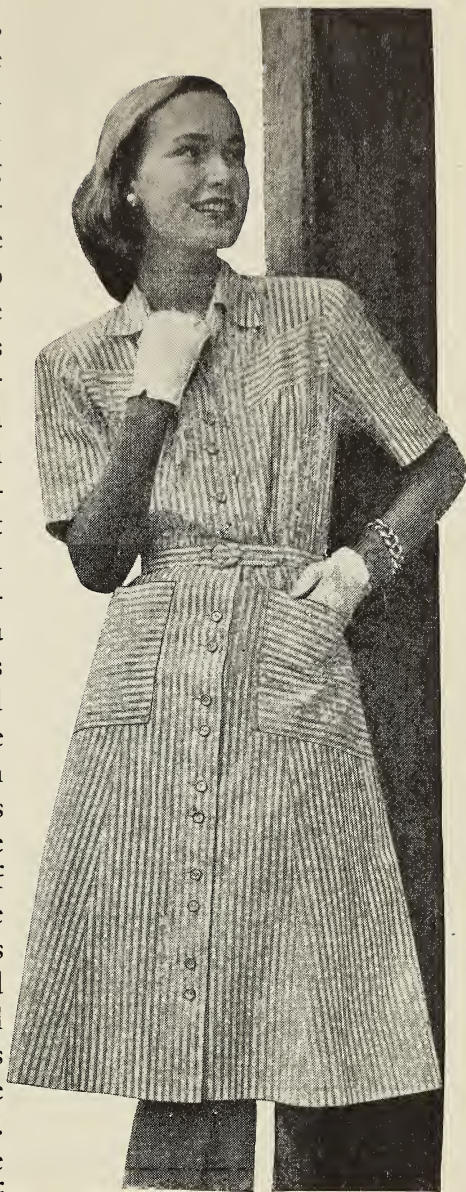
1. How may line and shape be used in producing a pleasing design?

Line. Line determines the shape of a form and the shapes of the parts comprising it. In character, lines may be straight, curved, or crooked; their direction is expressed as horizontal, vertical, or oblique. Much has been written concerning the significance of lines and the power they have to convey ideas. Straight lines, direct and obvious, are regarded as suggesting serious purposeful endeavor. Curved lines are regarded as suggesting flexibility, activity, grace, and growth—the upward curve expressing joyousness, the downward curve expressing a sense of finality and sadness. The crooked line expresses a fluctuation of interest, uncertainty, and an undirected course, and is regarded as bad and unsatisfying in any or every design. The vertical line stands upright and suggests high aspiration and nobility to the observer. The horizontal line suggests rest, placidity, and comfort; and the oblique or diagonal line conveys a sense of reserve and restraint. If both vertical and horizontal lines are used, the line direction is termed oppositional. Radiating lines express vigor, strength, and vitality. Perhaps because the radiating light of the rising sun is vivid in the minds of all of us, as are also the radiating lines of growing plants, this line appeals to us, holding our interest and engaging our fancy. The character and direction of lines have interested man as long as he has attempted to understand his world.

Form. Form is the shape or configuration of an object, determined by its enclosing lines. Its significance is twofold: It denotes, first, the size or bulk of the object and, second, its characteristic appearance apart from color. Not infrequently the phrase “bearing down like a battleship” is used to describe a vigorous, overplump matron in action. In this case, the inference of size and force is clearly conveyed by the suggestion of a likeness in form and effectiveness. Just as clearly, the term “shrinking violet” carries with it a definite inference of smallness of stature and structure, fragility, and lack of force.

The form or shape of any object conveys a definite and unmistakable sense of line direction. Let us look at such impersonal objects as trees.

Make rough sketches of poplars, pines, and elms, determining the line direction of each. At once you say, "The poplar is as slender and straight as can be, and is reaching high. It is vertical. The elm is fan-like, but it reaches up, too, more than out. And that pine seems to spread out as if unwilling to leave the ground. It is broader than it is tall. It must be horizontal!" In your analysis, you have come upon a basic fact. Structural line direction for any form or shape may be expressed as the relationships that exist between the horizontal and the vertical lines. Any figure, however curved, may be framed in a rectangle, and the relationship thus established between the vertical and horizontal sides of the rectangle will show clearly the line direction of the form or figure. Sometimes there are structural lines in the shape that also affect the sense of line direction. Your sketch of the elm shows oblique, radiating lines of the branches, seeming to spread and somehow to lighten the total mass of the tree so that it appears less heavy than the shape of the enclosing rectangle would suggest. This gives a lead important to the person concerned with design. If the structural lines of a shape or form are pleasing, their effect may be strengthened by repeating them. If they are not wholly pleasing, the forms may be studied to find in them such structural lines as may be emphasized to obtain the desired effect.



George B. Peck, Inc.

In this simple dress, the fabric and design show vertical line direction, except for the oppositional note introduced by the pockets.



Junior First Dresses

This dress is horizontal in line direction, both in fabric and in design. A note of oppositional line direction is introduced by the facings of front and sleeves and by the line of buttons.



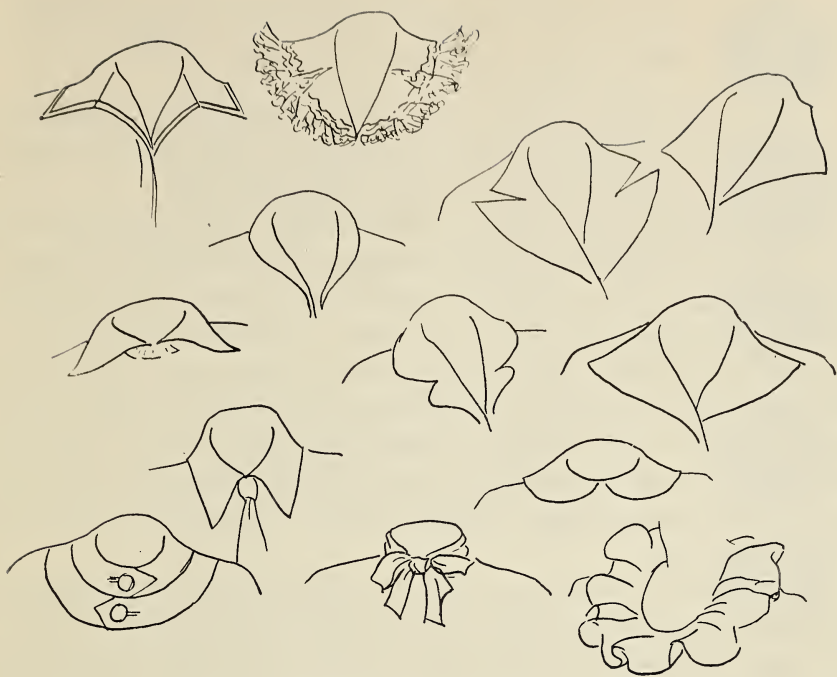
Junior First Dresses

Oppositional line direction is given this dress not only by the fabric used but by the dress design, which employs the fabric plaid to create a strong angle in the waist front and also introduces strong contrasts by the use of white collar and cuffs.



Bonwit Teller of Philadelphia

A strong sense of oblique line direction is created here by the use of a striking border, placed in a diagonal line tending toward the vertical. See how the line is repeated, not only by the lines in the border and the structural lines of the dress, but by the lines of the hat.



Lines may vary both in their character and in their direction, as is shown in these designs for collars.

Consideration may also be given to decorative detail that may likewise be employed to produce the desired effect. Already we find our minds racing ahead to the interesting design possibilities that are open to us through the use of lines of different characters as well as of different directions. But line and shape are only part of our resources for producing satisfying design. Color, which we will consider next, is also important.

SUGGESTIONS TO THE CLASS

1. From magazines brought from home select some pictures of dresses in which vertical lines predominate. Could you wear the dresses selected? Why?
2. Choose a picture which has many horizontal lines predominating. Are the lines straight or curved? What does a straight line suggest? A curved line?
3. Choose dress designs that through their line direction or line character seem to suggest a businesslike occasion; a gay, joyous occasion; a distinctly informal occasion.

2. Why are color and texture important in making a pleasing design?

Color, the third element in the production of a design, is perhaps the one on which the greatest interest centers in any discussion of design. Through color, the mass defined by line becomes visible.

Color and light. If you have ever played with a prism, you know of the association of color with light. If light is passed through a prism, it may be broken into its parts, and there will be a play of color, with red, orange, yellow, green, blue, and violet—every color or hue of the spectrum—becoming visible. Scientists have found that each of the component parts of sunlight is a light wave of a definite length. Each ray made visible when sunlight is passed through a prism is termed a hue. The hues, listed according to wave length, range from red, the longest visible ray, through orange, yellow, and green to violet, the shortest visible ray.

The mechanism which accounts for the difference in hues is explained as follows: Sunlight, holding in its white light all those possible hues, falls upon some material, such as that in a dress. The fabric may absorb practically all visible rays except the red. The discarded ray is reflected and gives its color to the dress. If the fabric lacks the ability to absorb light of any wave length, the sunlight is reflected in its entirety, giving the appearance of white. If the fabric or other material has no discrimination and absorbs all the light rays, reflecting none, black results.

Colored cloth usually owes its ability to discard a certain ray of light to the dye with which it has been treated. Hence we will turn from the possible effect of combining light of different hues, which you might accomplish with prisms, to the color classification commonly accepted for pigments or dyes.

Color classification. In this classification the first points of interest are the *primary* colors: red, yellow, and blue. These are the fundamental colors. They cannot be produced by any mixture of colors, and all other colors are derived from them. They are placed on the points of the triangle in the color wheel to designate their unique position in it. Placed at equal distance between them on the color chart are the *binary* colors, hues formed by combining equal amounts of the two primary hues which the binary hue separates. Red and yellow in equal amounts produce orange; yellow and blue in equal amounts produce green; and blue and red produce violet. Combinations between primaries and adjacent binaries in equal amounts produce the *intermediates*: red-orange,

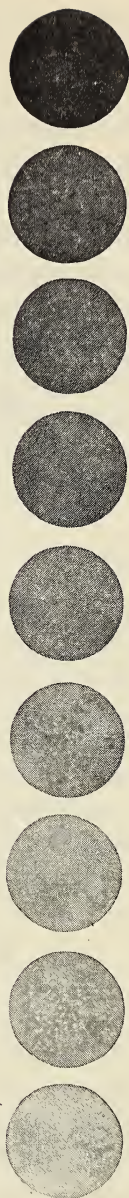
yellow-orange, yellow-green, blue-green, blue-violet, and red-violet.

All hues are commonly divided into the warm or advancing hues, which include red, orange, and yellow, and the cool or receding hues, which include green, blue, and violet. This classification, perhaps unconsciously made, reflects the association of the warm hues with fire and sunshine, and the cool hues with the water, ice, sky, and distant mountains.

Value and intensity. In addition to hue, other qualities of concern to persons interested in the artistic use of color are value and intensity. Value is the term used to indicate the degree of lightness or darkness. Value has sometimes been described as a ladder extending from black to white, with nine steps of gray serving as the rungs by which the elevation is accomplished.

Every hue may be produced in the whole range of values. The lightest values are termed tints. Tints seem to be white lightly touched by a hue or a hue heavily diluted with white. The medium range includes those values which appear to be produced by a mixture of the hue with neutral gray, and farther down the scale are hues that appear to be almost black or, at least, largely black. For example, pink is a light value, or tint, of red; rose is perhaps a medium value of red; and wine is a dark value of red.

Intensity is the term used to indicate the strength of a color in comparison to neutral, or the brightness or dullness of a color. The importance of intensity in the successful use of color in design is hard to overestimate. Particularly is this true in the design of clothing. The colors of greatest intensity are usually harsh and dazzling, and rarely becoming when used in quantity, as for a blouse, dress, or coat. Their contribution to any design is best made when their use is limited to that desired for accent or contrast. Use of those values which reduce the intensity to a marked extent is advised for all other parts of the design.



These are the nine steps of the value scale.

Texture. Texture is the last element in design to be considered. It is determined by the structure or manner in which component parts of the material or object are put together or united as a whole. One definition of texture is "the character imparted by the manner in which the threads or yarns are put together in a woven fabric." Terms used by the artist to describe textures are *glossy* or *dull*; *smooth* or *coarse*; *sheer* or *heavy*. The same color in two different textures will vary in value and in pleasingness. Harsh intensities are magnified by the sheen of satins, and they are softened by the sheer, fine textures of chiffons. In dress design, the texture of the fabric should be suitable to the lines and style of the dress, as well as to the type and figure of the wearer. Interesting contrasts effected by various texture combinations are often overlooked as possibilities in design because the more obvious contrasts of color are commonly employed.

SUGGESTIONS TO THE CLASS

1. List all the colors or hues that appear in the clothing of the girls in the class. Note the relationship between the intensities of the colors used and the amounts that appear in each dress design.
2. Choose materials from among those supplied by your teacher that because of their texture suggest daintiness, sturdiness, graciousness.
3. Visit three houses to observe the use made of color to add to the enjoyment and beauty of home environment. What colors are employed? What intense colors are used and in what way? To what extent are tints used?

3. *How may pleasing color choices be made?*

Importance of color. The importance of wise color choices in clothing selection and planning is indicated by the keen interest commonly shown in any decision concerning color for clothes. If you were to listen attentively to the bits of conversation that float out of the fitting rooms in the ready-to-wear section of a large department store, you would find that the question most often asked by the potential purchaser, trying on frocks of this color and that, is not about the wearing quality of the material, or yet about the exclusiveness of the design or its modishness. Instead, with almost parrot-like regularity, the queries repeat themselves: "Does the color do anything for me?" "Is the color becoming?" Assurances by the saleswoman that *everyone* is wearing lemon yellow

should not be enough to satisfy you. If, when you try on a dress of this color, the mirror reflects a bilious version of your usually spirited self, you should protest that you wish a dress of a becoming color. Unless you can express your demand in specific terms, shopping will be wearisome and unfruitful, and your own attempts in selecting or creating dress designs will be woefully unsatisfactory. Let us consider the questions which must be answered correctly if the color chosen for any dress is to prove satisfying.

Suitability to the season. Perhaps the first question to be raised will be, "Is this color suitable to the season of the year?" In general, dark, subdued colors and dark, "warm" colors are chosen for winter; gay colorful prints are worn in the spring; and light, "cool" colors are popular in the summer. Dark sheers are popular in the summer, of course, but in their case, the sheer texture conveys a sense of coolness that is more striking than the seeming warmth of the dark color.

Suitability for the occasion. The second question might be, "Is this color suitable for the occasion on which this dress will be worn?" A dress or coat planned for school or street wear, or for travel or business, should express a degree of reserve, permitting the wearer to pass on her way without being conspicuous or "clothes-conscious." Medium and dark values in becoming hues, or neutral hues with pleasing color accents, are suggested as suitable and practical for public wear. The bright, gay colors used in some seasons for evening wear seem appropriate to the festivities of the dinner dance or the school party. These are also suitable for the print or other wash dress used for sports or neighborhood wear and for the housecoat worn at home.

Suitability to the wearer's size. The third question to be raised in some cases may be, "Will this color be becoming to a person of my size?" The person of slight build may not be concerned with the problem of increase in apparent size through the unfortunate choice of colors. For the woman or girl of larger build, the choice of a color that will not increase size is highly important. Colors least flattering to her include the warm and advancing colors, white and other light values, and sometimes black. These tend to emphasize any imperfections in the silhouette that often attend size above the average. Color choices to be commended include dark values of blue, green, or brown, depending upon the coloring of the individual.

Suitability to individual coloring. This brings us to the fourth question, "Will this color be becoming to a person of my coloring?" First, let us consider what determines the coloring of an individual. Doubt-

less the first color to be observed will be that of the hair, and almost at once the individual will be classified as a brunette, a blonde, or an auburn-haired person. If a comparison of several brunettes or blondes is possible, variations in color within each class will appear. Brown hair may have glints of red or golden orange; blonde hair may be ashen, honey color, or golden yellow. Differences in coloring are next noted in the eyes. Brown eyes are warm; blue, green, and gray eyes are cool; and hazel eyes are intermediate. More important in determining becomingness of color than the colors of hair and eyes is the skin coloring. If you have thought of your skin as white, hold a piece of white paper to it. You will find that your skin is a light gray-yellow-red, possibly touched with violet or brown. Too much emphasis cannot be placed on the need for considering individual skin coloring as changing or unstable, dependent upon age, condition of health, condition of summer tan or of winter bleach, such as a long indoor residence would produce. All too frequently one hears the statement, "I have always worn blue" (or green or brown). Usually in these cases an attempt has been made to stress by repetition the color of the eyes. Not always is the effect as flattering as expected. Changes in the skin color may render once pleasing colors most uncomplimentary to the unsuspecting wearer.

In general, the effect of passing years is to increase the amount of yellow in the skin. Contrast your own cheek with that of a baby to see if this is not true, even in the teens. This increase in the amount of yellow in the skin makes the use of yellow in the dress ill-advised for most women and some girls. Emphasis is given to the yellow in the skin by repetition and reflection. In this case the use of the complementary color in great intensity is also unfortunate in the effect it produces. The effect of complementary colors is to intensify each other. Hence the yellow in the skin is made more evident when violet is worn. This rule would suggest that the sun-tanned girl avoid violet and blue unless she wants to emphasize her tan.

The first consideration in choosing a harmonizing color for a person should be the determination of the dominant colors in the skin. This must be done for each individual, as generalizations are confusing. The skin coloring may be soft yellow-orange to orange-red; it may be creamy, pale orange, with red-violet in the cheek. In the first case, warm colors are found most becoming; in the last, cool colors are most becoming. Not every warm color would be becoming in the first case, nor every cool color in the last. In each case the right choice must be made, not only of hue, but also of value and intensity.

COLOR WHEEL



PRIMARIES _____

SECONDARIES or BINARIES _____

INTERMEDIATES.....

Dark values tend to take color from the face, particularly if worn next to it, unrelieved. A ruddy complexion may be made less evident by wearing black or very dark values. The person who has no color to spare may find sallowness emphasized by such use of black or dark values. Light values, worn next to the face, tend to add color to it, and also to enhance the color of the hair by contrast. Understanding of this is shown in the fairly common use of a collar frill or tie of light value with dresses of dark colors. An exception to this recommendation is made in the case of the person whose complexion, hair, and eyes are all of light value, showing little contrast. In such a case a dark tie or collar may be needed for accent when a dress of light value is worn.

The effects of intensity on skin coloring is interesting indeed. When an intense color is used, it reflects either its own hue or that of its complement upon the skin. For example, an intense green reflects red into the face. An intense blue-violet may reflect yellow into the face. The importance of basing one's choice of colors for clothes on individual coloring has been heavily stressed here. This added emphasis is given because of the common disregard for this consideration caused by following fashion's dictates.

Pleasing color harmony. The fifth question that arises in the consideration of the use of color in dress is, "How may this color be combined with one or more other colors in a pleasing color harmony?" The simplest color harmony is the *monochromatic* or *one-hue* harmony. In this case the color scheme is developed by combining one color in varying values and intensities. Monotony must be avoided and interest secured by pleasing differences in the values and intensities combined. Examples of monochromatic harmony are combinations of navy blue and delft blue or beige and brown.

The second type of color combination is the *related* or *analogous harmony*. It is produced by the combination of related or adjacent colors, as blue and blue-violet and green and yellow-green. Here, as with the one-hue harmony, differences in value and intensity must be sought or the similarity will seem so strong as to give the effect of poor matching rather than purposeful design.

The third type of color combination is the *complementary harmony*. In this, contrasting colors—those that lie across from each other on the color wheel—are combined. Combinations to be included in the list of complementary harmonies are yellow and violet, yellow-green and red-violet, green and red, blue-green and red-orange, and blue and orange. The fact that complementary colors intensify each other when placed

side by side introduces a new hazard into the problem of creating successful complementary harmonies. This type of harmony should be attempted only when both complementary colors are grayed; or when one color is grayed and used for the dress proper and the other, in greater intensity, is used for accent in the design. It is well for the beginner to avoid the use of this harmony because of the crude effects often produced by the unskillful.

Color plays an important part in the successful creation of balance. A spot of complementary color introduced as an accent should be placed so that it contributes to the balance of the design. If orange is to be used as an accent in a dress design of grayed blue, the color might be introduced as a tie or scarf knotted at the throat, as a vestee, or as buttons or piping. In each of these cases the accent is made to contribute to the balance of the design. If the accent were placed as an orange sash falling from the underarm seam of the skirt at one side, or if the design provided that orange kerchiefs peeked gaily out of pockets on one side of the waist and skirt, the balance would be lacking. By the unwise placement of even a small area of intense color, one side of the design would be made to appear much heavier than the other. The effect would not be satisfying.

A fourth type of color harmony is sometimes listed under the heading of the neutral harmony. In this combination, black, white, or gray is used for the dress proper, and a contrast is given by either white on black, black on white, or colors on white, black, or gray. Except in the combinations of black and white, this harmony rarely produces as vital and striking an effect as may be created in dealing with colors. Nevertheless, certain dress designs based on neutral harmony remain popular year after year. An example is the basic dress of black with which accessories of different colors are worn.

SUGGESTIONS TO THE CLASS

1. With the aid of the class, choose four colors which are becoming to you.
2. Make a list of the colors that you would like to have predominate in a winter wardrobe and those which you would use as accent notes.
3. Talk with some women near the age of your mother and ask them if they can still wear the same colors as they did when they were your present age. Why?
4. With the use of material make a miniature dress showing one of the various color harmonies.

4. What are the art principles to be observed in creating a pleasing design?

A design has been defined as an orderly arrangement of lines, shapes, colors, and textures. Whether the design to be created is for a great painting, an intricate necklace, or a simple dress, the principles governing the arrangement of lines, form, colors, and texture within the development of the design are the same. These principles are dominance, proportion, balance, and rhythm.

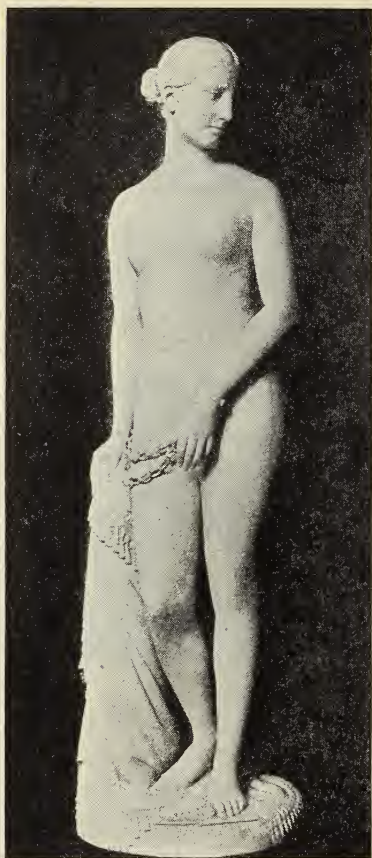
Dominance. Dominance may be defined as the distinguishing of the more important from the less important and giving emphasis to the major part. It results from the subordination of the parts to the whole and from

the establishment of the evident relationship of all other parts to the dominant note. Such subordination and interrelation conveys a sense of unity that is truly satisfying. Sometimes this is termed *emphasis*, but *dominance* seems a better term. The dominant line may be vertical, as in your rough sketch of the poplars. A dominant idea is expressed in a sports costume which is planned for the activities for which it is to be used. A dominant color note is struck in a dress or coat of green which is relieved by a beige scarf or a beaver collar. A dominant line is shown in the princess dress or the pleated skirt. Dominance is lacking in a "crazy quilt pattern," a "coat of many colors," and in a hodge-podge costume, assembled without due regard for any main note of color, line, form, or purpose.

Proportion. Proportion is regarded as second in importance only to dominance in the creation of satisfying design. Proportion is defined as the relation in size of one part to another. To be satisfying, proportions expressed by parts should be such that they seem to belong together and



Dominance is important in the production of a satisfying design. The curved line defining the opening in the wall dominates the entire picture. How many times is it repeated?

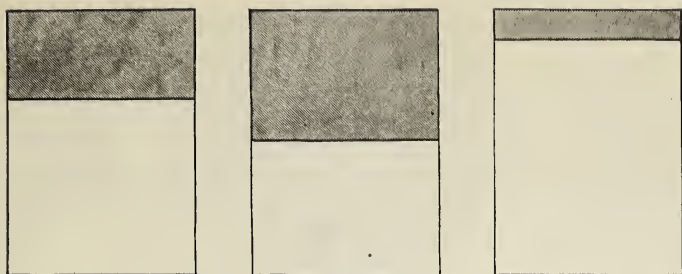


The Greek Slave: The basic structural lines of this figure show good proportion.

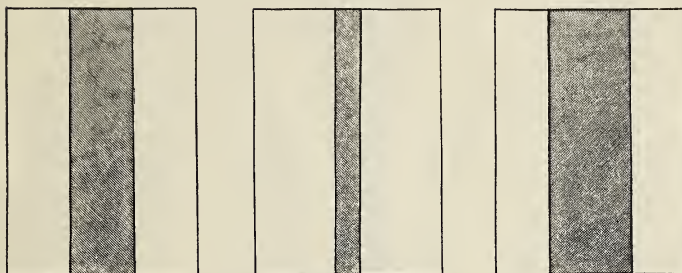
yet present such variation as to create interest. A rule long used by artists as a guide to the expression of good proportion is that the smaller parts should bear the same relation to the larger part that the larger part in turn bears to the whole. The Greeks, who excelled in creating buildings and statues that expressed beautiful proportions in line and form, formulated a statement of the ratios to be followed to attain them. They avoided dividing the space into two equal parts, alike and uninteresting. They preferred, instead, breaking up the spaces in the ratio of two to three, three to five, four to seven, and five to eight. Their sense of the rightness of these space divisions doubtless was influenced by their appreciation of the beauty of the human body and their careful attention to its proportions. No such exact ratios have been established to direct our efforts toward successful color combinations. This problem is more complex, as you will recall from the previous discussion of color harmonies. The hue, the value, and the intensity of any two colors that you may

wish to combine affect the proportions to be used for a pleasing effect. In general, equal amounts of any two colors will be found to contribute to a design unpleasing in proportion. Equal amounts of light and dark also tend to detract from the attractiveness of a design. The more intense a color is, the smaller the proportion of it that may wisely be in combination with any neutral color.

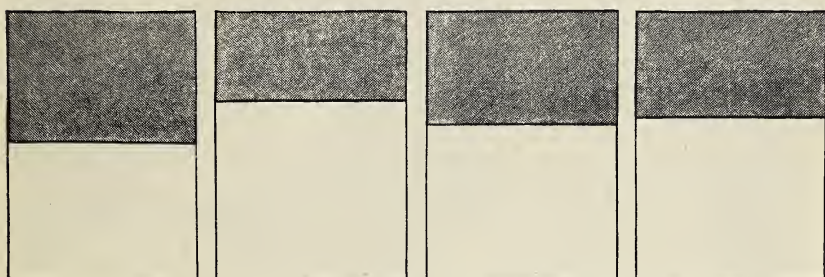
Balance. Balance is essential in the creation of a satisfying design. It is achieved by grouping lines, shapes, and colors about a center in such a way that the attraction on the two sides is equal and a sense of repose or rest is conveyed. Balance may be created by having the two sides of a design identical, or exactly alike. This is designated as formal balance. The human face and the human form are good examples of formal



Group A



Group B



Group C

A study in proportion.

balance. Simple shirtwaist frocks or tailored suits and coats are usually designed to express formal balance. There is dignity and strength in formal balance. Informal balance is created by having the attraction of the two sides of the design equal without exact duplication to achieve this end. This sort of balance is more difficult to obtain than formal balance because each shape, line, or color introduced into a design with informal balance must be considered in terms of the other parts of the design. Larger or heavier shapes must be kept nearer to the center to balance smaller shapes farther away. Color must be given careful thought in any effort to create informal balance in a design. Dark colors seem heavier, so exert a greater weight than do those light in value.



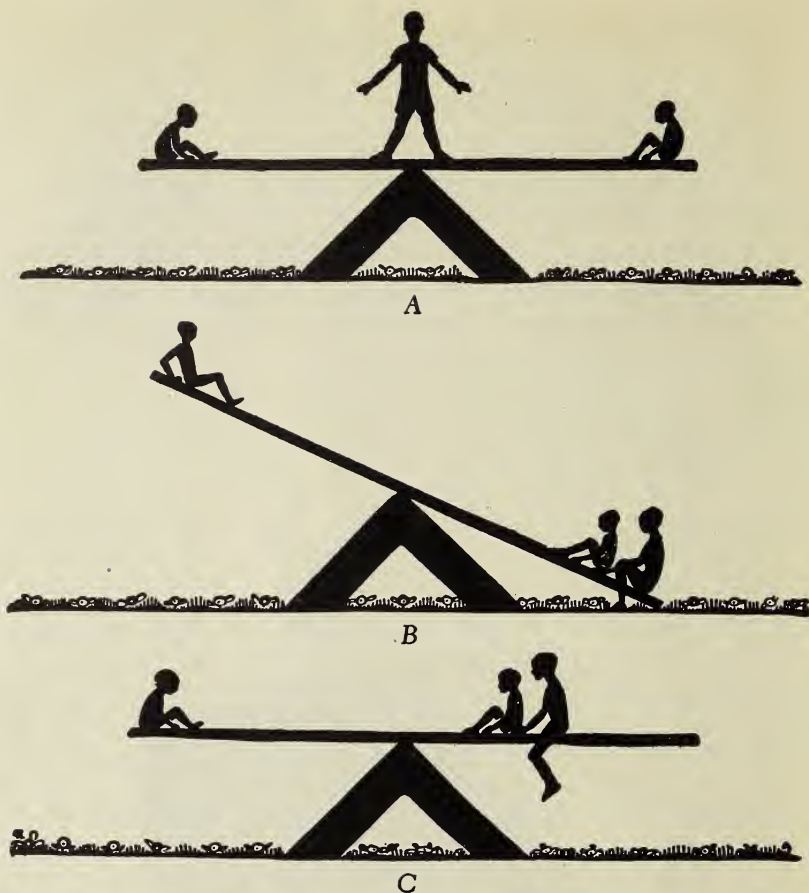
Left: University Prints

Formal balance gives a sense of dignity and strength. *Left:* Great simplicity characterizes this Grecian figure which is in the Vatican. *Right:* Informal balance is shown in the drapery of the statue of Julia, the daughter of Titus.



Spool Cotton Co.

Formal balance characterizes our simplest street clothes.



From Trilling-Williams: "Art in Home and Dress," J. B. Lippincott Company

This figure shows how the distribution of weight on a seesaw affects balance. *A*: Formal balance. *B*: Unequal weights at the same distance from the center destroy balance. *C*: Unequal weights are balanced by adjusting their distances from the center.

Colors of great intensity have greater power of arresting attention. Hence if such colors are used, they must be drawn to the center of the design and used in lesser quantity than is acceptable in a neutral color. In dress designs, informal balance is often employed in creating the graceful flowing lines of afternoon and evening dresses. Designs involving drapery lend themselves to the development of pleasing examples of informal balance.

Rhythm. Rhythm, or related movement, is evident in a design which seems to travel without effort from one part to another. One of the simplest ways to introduce rhythm into a design is through repetition



Rhythm is essential to a satisfying design. Here it is obtained through repetition of radiating lines.

of line or color. This is, in effect, putting "like things with like." The repetition may not be entire and complete, but it must suggest the dominant line or hue. Rhythm is also created in a design by alternation, in which a succession of two or more sets are placed in alternate order. It is seen in the grouping of tucks, in the spacing of ruffles, and frequently in the color scheme employed.

Rhythm through opposition is seen in the opposing lines of color in checks and plaids of dress fabrics. It is seen in dress designs that emphasize successfully the right angle or an angle approaching it by tucking, stitching, or by the seams of the parts. Rhythm by radiation is shown in designs in which there is an arrangement of lines all originating at a single point or axis. The hand with its radiating fingers is often cited as an example of rhythm through radiation. A handkerchief held at the center point falls in folds that suggest rhythm by radiation. A circular pleated skirt or a pleated jabot may likewise express rhythm through radiation.

SUGGESTIONS TO THE CLASS

1. From current magazines select dress designs that have marked unity of design; strong center of interest; good proportion; pleasant rhythm; desirable balance.
2. Select a design for a basic dress and choose for it several kinds of accessories, each of which may be used to emphasize desired center of interest.
3. Find illustrations of rhythm as shown in laces, embroideries, or fabrics. If textiles are not available, books picturing these may be used as references.

5. What is a good dress design?

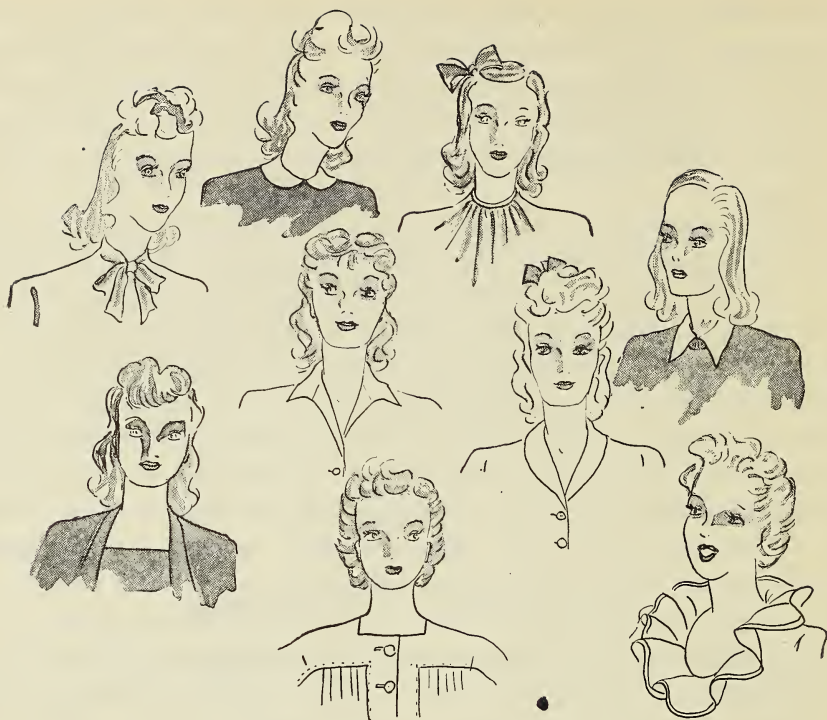
In speaking of clothes, when we say *design* we mean the idea for a garment as it appears in a sketch or in a pattern. When the design has been used in making a dress it becomes a *style*. When the style has become popular it is a *fashion*. A dress that is well designed with attractive lines and good proportions and is made up in suitable material in a dress style may become popular enough to be in fashion, but it still may not be a good style for you if it is not suited to your body lines, proportions, or coloring.

Defining the beautiful figure. You will recall that design was defined as an orderly arrangement of lines, shapes, colors, and texture. In the case of dress design this arrangement of lines, shapes, colors, and tex-

tures should be directed and controlled by the shape and line of the human body over which the dress will be worn. Our ideals of what constitutes a beautiful normal human figure are molded in part by the work of artists who have been able to make visible their ideal of beauty and in part by what is thought to be pleasing in our own times by our own social group.

Differences between the artistic ideal and the popular understanding are evident both in observations made in art galleries, where the thickness of the waist of Venus de Milo is a frequent subject of conversation, and also in comparisons we may make between the portrayal of the human form by artists and by fashion designers. The artist portrays the human figure as $7\frac{1}{2}$ heads high—that is, $7\frac{1}{2}$ times the length of the head; the fashion plate may present it as 9 heads high. The artist uses approximately $1\frac{1}{2}$ heads as the measure of shoulders and hips; the fashion plate may lessen this measurement by a fourth or more. Needless to say, the artist has used measurements common to well-proportioned human beings. The fashion plate presents an unreal basis for a dress design because it both narrows and lengthens the rectangle representing the human body. Let us see how these body rectangles of ours actually appear. The height of the average girl of high school age is $6\frac{1}{2}$ to 7 heads. Generalizations concerning her breadth are more difficult to make, as can be understood. Some are broad; some are narrow. Did you make a rectangle, drawn to scale, showing your body area and line direction? If so, comparison of this rectangle with that drawn by other class members points out the basic differences to be considered in choosing or making dress designs for members of your class.

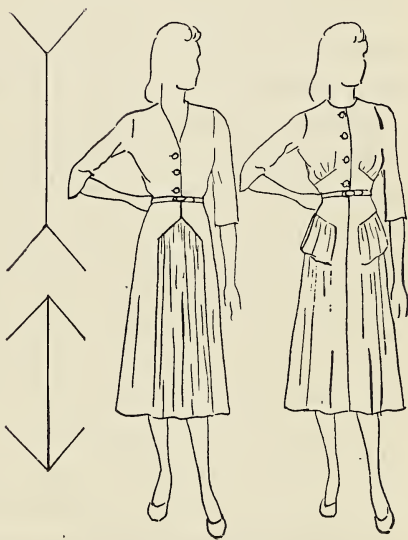
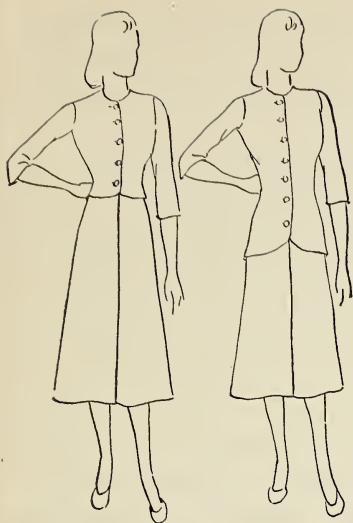
The body rectangle indicates the line direction of the individual; it shows the sort of curves that characterize her body. If a person is short and stout, the body rectangles are shortened and the body lines tend to become circular. In such a case the line direction of the body is horizontal. The body of the athletic young woman expresses a vigor and forcefulness that is well expressed in oppositional line direction. The structural lines of the dress design should be in accord with the structural lines of the figure, and their use in the design should be such as to improve, if needed, the line direction and the proportions of the body. This gives the basis for choosing effective lines and shapes to be used in the design. Knowing this and knowing the rules of arrangement or the art principles, you are ready to study different designs to determine which ones are pleasing. The rules of arrangement include dominance, proportion, balance, and rhythm.



In a successful dress design the shape of the face is considered, as is the shape of the neckline.

Emphasis on the face. The dominant idea to be expressed in a dress is the personality of the wearer. The face is generally regarded as presenting the best cue as to what the person truly is like. The design of the dress, then, emphasizes the face as the dominant expression of the personality. The center of interest in a dress design should, therefore, be placed near the face to contribute to its dominance. Only in a poor design is the attention led away from the face by elaborate cuffs, buckles, pockets, and misplaced corsages, or by scattered detail.

The neckline is a means of contributing to the dominance of the face in planning a dress design. It may, by repeating the lines of the face, either add to or spoil the beauty of the design. For example, if the face is square, a broad or square neckline may lead to an overemphasis of a characteristic which one does not wish to make dominant. In such a case the use of the diagonal line, which does not contradict nor yet repeat, is found pleasing. A round neckline may make the roundness of the face a dominant characteristic; but if the curve of the line is kept



Body proportions should determine the choice of dress design. *Top left:* The short jacket adds to the apparent length of the skirt. *Top right:* The long tunic gives greater height to the figure than the short tunic. *Bottom left:* Determine which spacing of lines adds to the apparent width of the figure. *Bottom right:* Note the effect of the diagonal lines, those directed upward and those directed downward.

and extended from a circle to a U, there will be neither contradiction nor unpleasant emphasis of the lines of the features. The character of the neckline may also influence the apparent width of the shoulders and the seeming length of the neck.

Proportions in dress design. To be satisfying, the proportions expressed in a dress design must reflect those of the human body without necessarily duplicating them. As was already pointed out, good proportions are subtle, the relationships not being immediately apparent. Such relationships as one to one, one to two, and one to three are easily detected by the eye; such relationships as three to four, five to seven, and five to eight are not so obvious and give pleasure because they are more subtle. The body areas considered in dress design are four. Roughly stated, the first area is that of the head and neck; the next extends from the shoulders to the waist; the third area is from the waist to the widest part of the calf or to the line of the hem of the skirt; and the fourth area extends from that line to the sole of the shoes.

As has already been said, the character of these areas determines the line direction of a person. The relationship that exists between these areas establishes the proportions that must also be considered if a pleasing effect is to be created.

Pleasing proportions should be expressed not only in the relationship between two areas, as waist to skirt, but in the subdivisions of these areas and in their relation to the whole body design. A yoke, if used, should bear a pleasing relation to the waist area. A flounce, if used, should bear a pleasing relation to the skirt area. Both, however, should bear a pleasing relation to the whole design. Even the effect of the width of the belt may be found important in determining the pleasing proportions reflected by a given dress design. In dress design shifts from the normal proportions of the human body are shown in the long blouse that extends the waistline to the hips, and in the dress of the Empire Period that raises the waistline so that it falls just under the bust. Other variations found in historic costumes are the gross exaggerations of both the hips and the upper portions of the body shown in hoopskirts and in bustle dresses. Some of these variations have been such as to destroy the sense of normal proportion in the dress design and to contradict the form of the area which the dress was planned to cover.

Maintaining good proportion in sleeves and collars is important in the creation of a satisfying design. The sleeve should be structurally related to the arm which it will cover. If it is to give a pleasing sense of proportion, it should extend just beyond the joining of the arm with the

shoulder and it should end slightly above or below the elbow or extend to the wrist.

Balance. You will recall that balance in a design may be either formal or informal. Formal balance is obtained by having both sides exactly alike. Informal balance is obtained by so choosing and arranging the elements of the design that even though the two sides are not identical they seem to be of equal weight, interest, or strength. We commonly think of balance as between two opposing forces or two sides. This is true but not the whole truth. Balance should exist between the right and the left side, and also between the top and bottom parts of the design. Often balance is destroyed in a dress design by poor structural lines, as well as by the placement of trimming and ornamental detail or by over-emphasis of a number of things.

Rhythm. Rhythm is shown in a dress design when the lines lead the eye from one part of the design to another without effort and with satisfaction. The first lines to attract the eye are the structural lines, including the edges of the skirt hem and the lines marking the side of the skirt and the outlines of the waist, including shoulder, neckline, and sleeve. Then the eye turns to details of collar, belt, cuff, and other trimming. If the lines are in accord, the design is a pleasing one. If the lines are haphazard and conflicting, it is a disagreeable one. The sense of rhythm has been disturbed. The design has failed to achieve beauty in an important detail. Rhythm may be produced through repeating straight, vertical, or horizontal lines, or modifications of these in harmony with the lines of the figure. It may be obtained by repeating the fluid lines of the Oriental dress or the classic folds of a Grecian robe. Adaptations of these lines are found in some of the most charming afternoon and evening gowns. Rhythm also may be produced by repetition, of which the use of vertical lines in the pleated skirt and pleated blouse is an example. Rhythm is destroyed when conflicting lines, which prevent the easy passing of the eye over the design, are introduced.

Good dress design. The dress design can be designated as good only when it is suited to its purpose. The dress that impedes motion, restricts action, and hampers the life of its wearer cannot be said to be of good design, regardless of how pleasing its proportion may be or how artistic the color combination which is achieved. In former days, dress designs that confined the waist even to the point of deformity were accepted as fashionable. These could not be called good dress designs because their effect on the human body was destructive rather than protective. A good dress design is so related to the human body that it not only emphasizes

the beauty of that body but also protects its health and permits freedom and grace of movement.

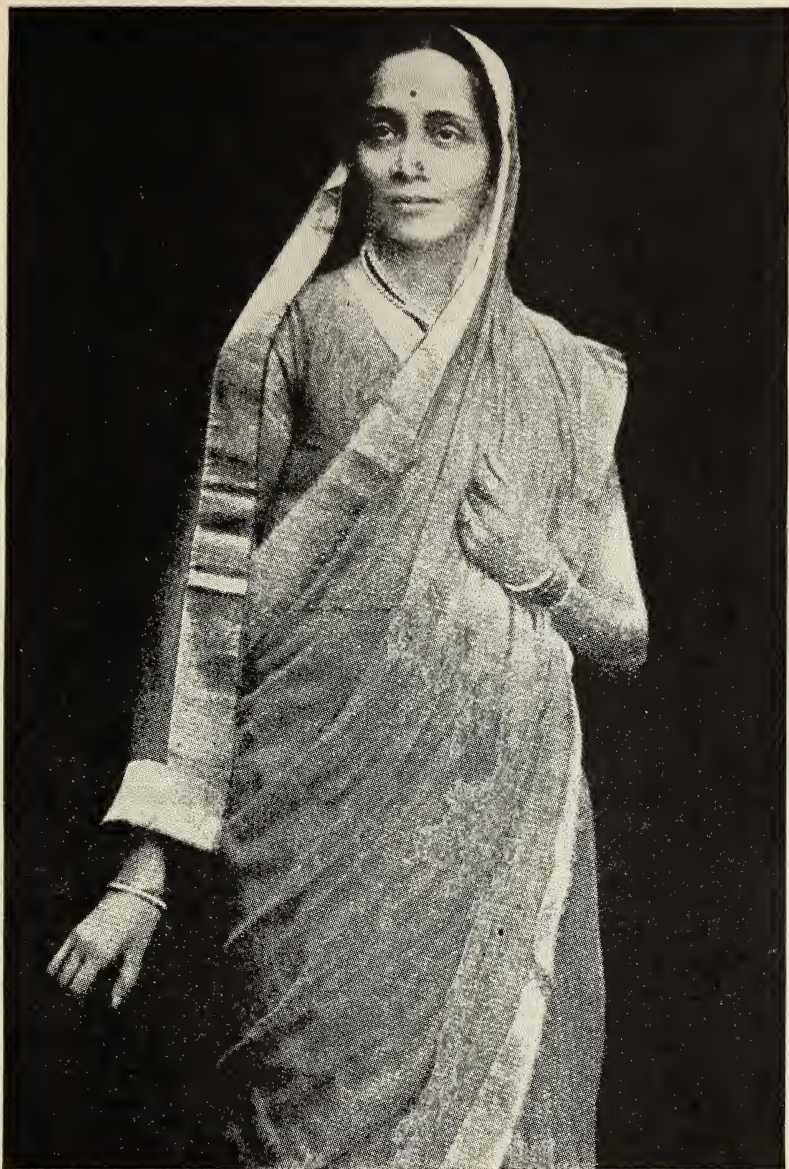
SUGGESTIONS TO THE CLASS

1. From the department file select pictures which show how the lines of the body may be repeated in the lines of the dress.
2. Choose two dress designs that are good examples of formal balance; informal balance.
3. Choose a picture of a tailored dress or suit that is a good example of rhythm.
4. Write a short paragraph describing the basic items you must consider when choosing a dress design.

6. How are today's dress designs influenced by the past?

What we wear today, just as what we eat, what we think, or what we desire today, is largely determined by the past. In fact, in many ways, our present is an extension of our past, just as what we do tomorrow may be considered an extension of our present. Sometime, thousands and thousands of years ago, someone discovered how to stitch skins together to make a covering for his body that would shut out wintry winds and stinging snow. Thus the making of clothing began. Centuries later someone else discovered a way to make wool fibers cling together to make a yarn, and the making of strings and cords began. Later someone else found a way to interlace yarns or cords together to make cloth—a wonderful discovery. Thereafter, the making of cloth became one of the ways by which people provided for their physical comforts, increased their physical attractiveness, and expressed their creative or artistic impulses. It became the expected thing that the chieftains and their families should have more and better articles of dress than ordinary people. Dress then became not only a protection from scorching sun and bitter cold, from direct contact with objects that might injure and dirt that would soil, but a means of indicating the rank and importance of an individual, as well as his possession or lack of wealth.

Grecian dress. The Grecian dresses of the time of Homer were made of straight pieces of hand-woven wool or linen, draped to the figure, falling from shoulder to ankle and confined at the waist with a girdle. The robe has, by its graceful folds, added to the charm of many statues.



A young Hindu woman clad in the graceful sari that has been the characteristic garment of the women of this faith for more than two thousand years..



Left: Eirene and Ploutos: Glyptothek, Munich. The costume of Ancient Greece is shown by this noted statue. The long, draped garment is the chiton. It is confined at the waist by a girdle, and the length is adjusted by the blousing of the robe. *Right: Matron from Herculaneum:* Albertinum, Dresden. The dress of the Romans was much like that of the Greeks. However, greater fullness of fabric and less grace of line is evidenced.

The dress of men and women of equal rank was much alike. Under Persian influence, an adaptation was made of the drapery so that a semblance of a sleeve was made by folding and pinning the drapery with heavy clasps at the shoulder.

Ornaments included heavily wrought gold with a few stones inset. Necklaces, earrings, finger rings, decorative combs, hairbands, and decorated hair nets all served for personal adornment; but the wealth of the household was reflected by the number of robes rather than by the decorative ornaments owned. The outer wrap, an essential part of proper apparel according to law, was a large rectangular piece of woollen material, usually wrapped around the back, over the right arm, and up

over the left shoulder. Sandals, made of leather cut the shape of the sole and fastened about the ankle with straps, were worn to protect the feet. The grace and charm of the Grecian costume have led beauty lovers to regard its lines as more satisfying than those of any costume since created. Its influence is still found in dresses designed for evening wear.

Roman dress. The Romans modified the robe slightly, using sewing and shaping not unlike that now used in the simple butterfly blouse to shape something more of a sleeve. The Romans had fans for air movement and maneuverings, and handkerchiefs to wipe perspiration from brow and hand. Then, too, there were parasols to be carried by the attendant. The color of footwear was governed by law. The color of the dress designated whether the person was free or slave. Purple was worn by the rulers, white by the free, and brown and black by the slaves.

Medieval dress. During the Middle Ages some of the primitive people found in the chill winds of winter the inspiration to afford themselves protection from the weather by cutting and shaping the fabric so that the resulting garment was fitted somewhat closely to the figure. Trousers and tunics with crudely

shaped sleeves resulted and were accepted with satisfaction as masculine attire. Woman's dress seems to have been little changed by such adventures in cutting fabric. Long, loose-flowing robes confined to the waist



Jeanne d'Armagnac. As the medieval period drew to its close, woman's dress became much more complicated. The simple mantle of the Greeks had been discarded for a dress with sleeves and fitted waist to which a long, full skirt was attached.



Elaborate headdresses and long trains of luxurious fabric, heavily furred, adorn the fair ladies of medieval tapestries. These stately processions of long ago are reflected in present-day wedding ceremonials.

by a girdle were commonly worn. So whenever you note that the dress of women and men is usually different, you are recognizing an influence from the Middle Ages. Whenever you pull on the pants of your ski suit, you have reason to think that not only do chill winds drive you to such apparel but that they inspired the whole idea of trousers or pants as a protection against their force.

In the medieval days, expression of one's loyalties to a ruler or lord and of one's social prestige, as well as of one's wealth, became an object of dress. There were two main classes of people: the few who had every advantage, and the many who had none. Class distinctions were stressed, and personal discomfort and restrictions in movement were willingly endured by those of the upper class, since the dress gave evidence of the fact that the wearer did not need to engage in any useful work. Some influence from this period may be noted from time to time today. It may be seen in the pomp and ceremony of elaborate church weddings with veiled brides in trailing wedding dresses, sometimes making it necessary to have train bearers and maids of honor. All this duplicates—in some respects, at least—some of the pageantry of the life of the lady of the castle long ago.

During the late 1500's a grotesque silhouette with wasplike waist and barrel skirt became the vogue for the ladies of the court. Huge ruffs adorned the neckline, and long trains lined with fur impeded any ease in walking that may have remained after the lacing necessary for the wasp waist had already sharply limited the breath. Scented gloves, gay knitted hose, and elaborate fans added to their luxurious apparel. The detail is best observed from pictures of Catherine de Medici and Queen Elizabeth. Royal favor largely determined details of fashionable dress. Of course it should be remembered that the majority of the people could not afford and were not allowed even decent apparel. Never have these royal fashions returned in

their full glory, but from time to time some detail—as a wired ruche at the neckline or a draped overskirt—has again had a brief vogue.

As long as kings and their favorites determined the fashion, durability, simplicity, and practicability were lacking. Clothes were made to express a love of luxury, a disregard of cost, and a concern with leisure. There came a time when the reckless extravagance of the French rulers and their noblemen passed the limits of tolerance of the driven and exploited people, and the flame of the French Revolution swept over the land. Then the change of ideas became apparent in woman's dress. The desired materials were the simplest of cotton fabrics: lawn, muslin, and India prints. The styles were simple, with lines much like those of a long chemise—straight, slight, and slender.

The Romantic period. This period brought into style the dress with the broad shoulder, the ruffled fichu, and the full skirt. This emphasized the wearer as a weak, faint, and frail creature, tightly laced stays and inactivity doubtless contributing largely to that impression. This period



Marie de Medici. Stiff skirts of huge proportions served to accentuate the pointed, narrow waistlines that had royal favor. The heavily embroidered fabric, trimmed with ermine, the lavish use of jewels, and the high ruff of all emphasized the wealth and rank of the wearer.



A simplicity almost severe characterized woman's dress throughout the French Revolution and in the years that directly followed.

slipped into the Crinoline period of the 1860's. By no chance could these costumes be regarded as comfortable or convenient. Neither were they related in line to the body for which they served as a covering. However, there was a sort of charm to the crinoline dress which has caused its influence to be felt recurrently from those days until the present, usually in evening clothes.

From the Crinoline period, dress passed into that of bell hoopskirts and later to that of puckered betrimmed trains. Neither of these could be regarded as beautiful, simple, or related to the slowly evolving way of life of the people—that of democracy.

Beginning of modern styles. However, during the last half of the 1800's something was at work in the times that stimulated and directed a change in woman's dress. Educational opportunities were slowly opening to women, and with education came the opportunity for employment—first in teaching, and then, more slowly, in certain of the other professions. What woman wanted of dress changed somewhat. The costume of the professional woman must not only enhance her attractiveness within reasonable limits, but it must at the same time afford her an ease of movement required by a professional post; it must contribute toward an impersonal relation in the schoolroom or office, and must stress as lightly as possible differences between men and women. In 1880 tailored suits were introduced as an English vogue, and they at once gained great popularity as apparel admirably suited to women enjoying a new freedom, a freedom that permitted them to work and travel, to live more directly, and to resort less and less in dress to what could be designated as "woman's wiles." This brought several points of similarity between woman's dress and man's.

Democracy and dress. Relatively little class distinction is evidenced in present-day dress for women. A wide variety of fabrics with pleasing decorative design is within the reach of most women, if not all. Use of synthetic fibers has made possible the manufacture of fabrics that simulate the richness of the luxury fiber, silk. There are no color restrictions except those of fashion and individual taste. Quantity production, which is attended by lower cost, combined with the relatively widespread earning power, brings fashionable dress within the reach of large numbers of women.

Designers of American fashions.

As early as the American Revolution fashions followed the dictates of Paris designers. Cities throughout the Western world copied Paris fashion trends and rural areas copied those of the cities. By the time of the War between the States, enterprising salesmen, at great risk, ran the blockade to bring silks from the Orient and hats from Paris to the Southern belles who were cut off from the fashion world by war.

In the prosperous early years of this century, women who could afford trips to France brought back fabulous clothes having that "straight from Paris" look. But with the fall of Paris in 1940, and the resulting breakdown in trade, these fashions were no longer available. Gradually the names of American designers began to appear in the news on fine garments. Now there are many American clothes designers for the American women. These designers have learned much from Paris, but they probably do not yet duplicate the fine detail and the perfect finish that characterized the French dresses of twenty years ago. They are designing apparel that is particularly suited to the busy, purposeful days that are the essence of American life.

Most of us cannot afford the expensive, custom-made garments bearing the famous names of the better dress designers, but we find their ideas and skill reflected in even the simplest clothes that we buy, for ideas from the exclusive models are quickly copied in the lower-priced clothes. Sometimes a particularly successful model by a well-known de-



The Romantic period is as truly expressed by its dress as by its poetry.



From Nystrom: "Economics of Fashion," Ronald Press

The tailor-made suit was an English innovation accepted in the late '90's. Its introduction seemed timely in view of woman's new professional activities.

signer starts an entirely new fashion trend.

Among the American designers whose names are well known are Adrian, Hattie Carnegie, Edith Head, Claire McCardell, and Clare Potter. Each of these has a seasonal showing in New York or in Hollywood. Emily Wilkins has become famous for her American fashions for teen-age girls; fashions designed and especially proportioned to fit growing figures and to bring out the personality of the girls who wear them. Miss Wilkins began her career as a designer of fashions for girls by designing dresses for children in the movies. Her career has stimulated the interest of teen-age girls in attractive clothes and also in choosing careers in fashion designing. Few of those who express interest in fashion will become designers. Most of them will be enriched by an enthusiasm for design that makes creating a dress a satisfying experience.

SUGGESTIONS TO THE CLASS

1. Make a list of the changes evidenced in woman's dress today in comparison with that of a century ago.
2. From the department file choose illustrations that show how our expression of modesty has changed in the last century.
3. Clip from magazine pictures a modern dress which you think shows influence of Grecian dress; the Crinoline period; the early 1900's.

SUMMARY

We have seen that dress design, like any other design, is an orderly arrangement of lines, shapes or forms, colors, and textures. In the successful dress design this arrangement is directed and controlled by the shape and line of the human body over which the dress will be worn.



Contrast the bulk and cumbersomeness of these clothes of 100 years ago with the modern play suit shown on page 64.

We must accept the area and proportions of the actual human form instead of the distorted ones common in fashion magazines, if we hope to plan or select pleasing dress designs for human bodies.

After the area, line direction, and character of curvature of the body form have been determined, the next step in the development of a pleasing dress design is the application of the same principles that an artist would use in creating a beautiful picture or design, namely, dominance, proportion, balance, and rhythm. In developing or selecting the design, special consideration must be given to the colors employed. Satisfaction with the design will come only as the color or colors chosen are seasonable, suitable to the occasion, becoming to the individual in



From Nystrom: "Economics of Fashion," Ronald Press

Designs which are simple in line and so cut as to permit free movement characterize the play clothes of today.

tendant opportunity to earn has given modern woman a unique opportunity to make her dress express her personality, minimizing its use as an expression of social prestige for herself or the male members of her family.

Today, as never before, woman's dress may contribute to her bodily

regard to both her size and coloring, and successfully combined with other colors in the design.

Seemingly since earliest time, dress has been used to enhance the beauty of the wearer, to express—and sometimes to show and store—the wealth of her family, and also to announce its social standing and prestige. We have seen it used to express loyalty to a feudal lord, and to flatter, by imitation of their apparel, the rulers in the courts. We have seen that with the French Revolution the new theories of equality were reflected in the simplicity of the dress. Period after period in ages past seem to show that quite as real as the satisfactions clothing afforded the body through its protection from sun, wind, rain, and cold were those satisfactions that came through the favorable impressions one's clothing made on others, and the pleasure of self-expression afforded through clothing.

Throughout history, so strong has been the urge "to do as others do" that women have accepted customs and styles of dress which were uncomfortable, which presented health hazards, which limited activity, and which often were really ugly.

The movement for woman's education and the opening of the at-

comfort, facilitating the activities of work and play. Also, as at no other time, the satisfactions of dress are extended to a greater number of the population, a shift which was to be expected in a democracy. We find fashion still a force in clothing choices, as in earlier days, but we see trends toward the limitation of the force of its edicts. There is still progress to be made, but scrutiny of the past indicates that advances have been made in our concept of the kind of satisfaction we desire from clothing, and also as to the means that may be honorably employed to obtain such satisfactions.

3

Becoming Dress for the High School Girl

The preceding unit has outlined some of the points that must be considered by anyone wishing to be artistically and pleasingly dressed. However, not all the girls who read those pages will become well dressed. There is always a wide gap between knowing and doing. Recognizing the basis for judging what constitutes a well-dressed appearance does not necessarily mean achieving this end, although such recognition may contribute toward the clarity of the goal sought. The desire to attain the goal of being well dressed must be strong enough to motivate the girl to action if it is to lead to successful endeavor. How strong is your desire in this matter? Will you forego a movie in order to complete your personal grooming properly? Will you spend time to make a careful match of darning cotton or will "something about like that" satisfy you? The girl who strongly desires to be well dressed will give the necessary thought, time, and care ungrudgingly to this end. Of course, a personal maid might carry the laggard part of the way, but there are not enough personal maids in our country to make the problem of being well dressed other than an individual one.

If a girl truly wishes to be well dressed, she must be willing to accept the findings in her self-appraisal as the basis on which her selection of clothing design must proceed. She must become as familiar with her line direction and its degree of curvature and with her personal coloring as she is with her name. Such familiarity, linked with a growing understanding of color, line, and form, will prevent many of the unfortunate

choices that wreck many wardrobes. Just as she accepts her self-appraisal as a point of departure in this new venture, so must she also accept her present understanding of dominance, rhythm, balance, and proportion as only a beginning. She must eagerly experiment and study in order that her understanding of these may be expanded and her wisdom and skill in dress design and selection be increased.

She must be informed concerning trends in current fashion, and be able to relate these trends to her own characteristics in an effective way.

Then she must understand what constitutes appropriate dress for various occasions. Does it seem like a complex formula in algebra? It may seem so to some, but most women and girls find it interesting.

1. What determines attractive dress for the high school girl?

Individual design. Perhaps the fact that comes to mind is that the suitably dressed person is so clad that her clothing satisfactorily completes her individual design. The color, line, and textures employed in her dress designs seem exactly right for her. If she is average in body size, she will find many designs presented from which she may choose. Many girls differ greatly from the average. They may be small, tall, or stout. In each case, consideration of one's individual proportions is basic to planning suitable dress.

The small girl. The small girl may be short and plump or just tiny. Because of the small size of the body rectangle, the use of sharp color contrasts in main areas is undesirable. The subdivision of the main body areas by use of large collars, deep yokes, broad belts, and large sleeves violates good proportion. The dress problem of the small, plump girl is further complicated by the effect of roundness in her line direction, which must be neither contradicted nor accented.

The tall girl. The tall girl is one whose stature reaches the mark of about 6 feet, so coveted by boys and often unpopular with girls. It is unfortunate that resentment against being tall has been fostered, for tall girls may achieve a queenly dignity and graceful carriage not common to all. Although the tall girl must accept the vertical line direction created by the elongated rectangle of her body area, she need not repeat it by the long lines of a princess dress or by the use of panels. It is sometimes stated that horizontal stripes in the dress of a tall girl will lessen her apparent height. Unfortunately, the effect is not always as planned. The sense of steps going up, up, up may be given if the stripes are strik-



The gamut in the dimensions of girls. *Left to right:* The small girl, the tall girl, the stout girl, and the average girl.

ing and the spacing is not subtly done. In other words, the tall girl must accept the form of her body area, and plan for its artistic use as the basis of her dress design. Full sleeves with a decorative note, yokes that subdivide the areas of waist and skirt without sharp contradiction to the vertical line direction, and tunics that serve the same end will be found useful in the development of a pleasing dress design.

The stout girl. The stout girl, or even the girl whose curves duplicate those of the statues carved by the Greek sculptors of long ago, is at a disadvantage in social circles at the present time. The vogue for unnatural slimness fostered in Hollywood contributes to her unhappiness. Desire that "this too solid flesh would melt" may or may not bring her to sylphlike proportions. As long as the area of her body rectangle is larger than that of her friends and associates, consideration of this fact must be shown in the dress design. The creation of good proportion, the use of simple lines, a pleasing repetition of the vertical line in stitching, panels of proper width, and the right type of collar or vestee are all desirable. The ruffles and tucks that serve to accent the femininity of the small girl are taboo for the stout girl.

The wise girl not only recognizes the importance of aesthetic values in her choice of clothes but knows that an artistic and pleasing expression cannot be made unless each article of dress is well chosen and unless the array of articles worn together at any one time may be combined successfully to create a design pleasing in its detail and as a whole.

Simplicity. Overelaboration is avoided by those who desire to be well dressed. The importance of simplicity in matters of dress can scarcely be overstressed. An overelaborate dress often smothers the personality of the wearer and prevents the successful combination with other garments. It really does not fit into the wardrobe, and hence often possesses only a short period of wearability. One tires quickly of a dress whose features are such that it is easily remembered. Can you recall a dress or dresses that you have had that yielded brief satisfaction because of some overadornment, such as the excessive use of bows or ruffles or a striking or faddish cut? The wardrobe of the well-dressed woman is characterized by dresses pleasing and simple in design which may be successfully combined with a few well-chosen accessories to create a satisfying whole.

Suitability. Recognition of what constitutes suitable dress for various occasions is another characteristic of the well-dressed girl. The suitability of dress is largely determined by custom, changing as customs change. A half century or more ago a suitable traveling dress for a woman or girl provided mantles and veils insuring a degree of seclusion which characterized woman's life of the times. In modern times custom permits girls to travel with the same straightforward appearance which has long been accepted as their brothers' right, and such a costume as was worn in the 1890's would be deemed suitable only for a character in a historic play. Custom does not always consider the activity



Spool Cotton Company

Simplicity is important in being well dressed.

for which the garment will be worn or the comfort of the wearer, but these should be important considerations in determining the suitability of a garment. To a large extent, our interest in ease of movement or freedom and comfort leads us to modify custom. Our present idea of what is suitable is the outgrowth of custom modified by demands, past and present. Also, each of the various occasions for which clothing is specifically purchased has an atmosphere which influences what we believe suitable. Tailored clothes, knitted suits, and the like are said to be suitable for classroom wear; they are matter-of-fact and casual. Crepe

dresses with soft detail are suitable for tea dances or Sunday night parties; they are charming and proper. Pastel chiffons and rustling bouffant taffetas are suitable for evening wear. They are impractical, glamorous, and unrelated to dishwashing, hose-mending, algebra, and science, all of which form a part of the daily routine for many of us.

Fashion. Fashion is given consideration by every well-dressed girl. No one should desire to become Fashion's slave, but all should seek something more than a bowing acquaintance with her. For self-protection, as well as for self-expression, we need to be informed concerning trends in the current styles. There is quite a difference between leafing the pages in a fashion book and understanding the trends presented there. If the leafing is accompanied by critical examination, the observer may see that most of the skirts are sharply flared, or that most are not, and that perhaps a large number are circular; she may see that rows of buttons appear on the fashion pages and that pockets, in various shapes, are commonplace. Skirt lengths, necklines, and sleeves may all have her attention. For example, the location of skirt hems varies between the ankle and the knees over a period of years, merely at Fashion's dictate. One may not desire a skirt as long as the longest, when length is the vogue, nor as short as the shortest, when brevity is the mode; but in each case it is possible to adjust the mode to your own needs and tastes.

The attractively dressed girl never wears unbecoming colors or lines because they are fashionable, but, as is generally possible, makes choices that are both modish and becoming. If one maintains a sort of middle ground in regard to Fashion's edicts, it is possible to choose clothes that are individual and fashionable. The old adage, "Be not the first by whom the new is tried, nor yet the last to lay the old aside," is a guide to what has been termed "middle ground."

The well-dressed person shows regard for the fashion or mode in her apparel and yet manages to make it express her individuality. She is one of the group, and subject to group consciousness. Yes, but she is also an individual with a unique personality to express. In many cases, clothes are one of the few channels open to her for self-expression.

Fashions of other ages cannot be successfully incorporated into the present mode without change, nor can the fashion extremes of any given moment be accepted without adaptation to individual requirements. The designers would be forced to strange excesses and the world would seem bizarre if suddenly the dress designs that are devised to express the height of the mode were generally accepted. Then there would be few, if any, well-dressed persons.

Consistency. Perhaps the next characteristic of a well-dressed girl that comes to mind is that of consistency. There is an old saying that "One swallow does not make a summer." Neither does the successful assembling of becoming and suitable apparel for one occasion entitle a girl or woman to the description of being well dressed. The unity that characterizes her dress on one occasion must be apparent in her dress day after day before she can be so described. Cinderella may have been beautifully garbed at the royal ball, but that scarcely entitled her to be recognized as one of the well-dressed women of the realm.

Neatness. The well-dressed girl is immaculate in her person and dress, and maintains her wardrobe in good condition. Not only are time and effort required to secure the harmonious and attractive clothing that will enable one to be well-dressed, but time and effort must also be spent to maintain one's wardrobe in good repair. One cannot appear with coat buttons lacking, frayed cuffs, a soiled vestee, or unpolished shoes without thereby canceling the attractiveness that the rest of the costume might have. It takes time and care to maintain one's clothing in repair, but evidence of such expenditure is one of the requisites of being well dressed.

Grooming. The well-dressed girl is a well-groomed person. Absolutely essential to being well dressed is an efficient plan for personal grooming. Stringy hair, dingy hands with poorly kept nails, and other violations of good personal requirements familiar to all may reduce what might have been a highly pleasing costume to a rank below mediocrity. The well-dressed girl accepts the fact that time and effort as well as money must be spent in personal grooming. She knows, too, that rest and proper diet affect her appearance favorably, and that lack of rest and improper diet affect it adversely—often beyond the point that rouge, powder, and lipstick can cover up. She accepts the necessity of keeping fit.

SUGGESTIONS TO THE CLASS

1. Analyze the dress of some nationally known women; of English school-girls; of movie actresses. What characterizes the dress of each?
2. List the factors to be considered in judging the modish appearance of an individual. Consider your own appearance in terms of this list. In what regards is greater care needed?
3. Select illustrations for a street ensemble for the high school girl and for the business girl. Contrast the two, showing how age and occupation have affected the choice.

4. Plan a score card for evaluating the appearance of the high school girl, giving careful consideration to the factors to be emphasized in her dress.

2. How do environment and activities direct one's choice of clothing?

The great influence of environment and activities on choice of clothing is well illustrated by a tale of pioneer days in the United States. A German bride of noble family came over the seas to join her husband on the farm that he had homesteaded in the Middle West. He had written that the farm was ready and she should come. To her and her family that meant that he was established on a sort of baronial estate, in comfort and ease. The young woman came, with seven trunks of silk dresses such as would befit the lady of the manor and some simple dresses for the maids on whose service she expected to depend. She was met in a lumber wagon and taken to a rude stone farmhouse where the arduous life of the pioneer woman awaited her. Even the dresses she had bought for her housemaids proved unsuitable for wear in her new environment. The seven trunks remained unopened throughout half a century of the woman's life, and their contents—gorgeous garments of silk and fine woolen fabrics—later found their place as museum pieces. Although prized for their beauty, the message they should convey is seldom understood. They are mute witnesses to the relation of environment and activity to the clothing needs of the individual.

The rule of fitness. Few of us know anything of the sort of tragic adjustment shown by those seven trunks of unopened wedding finery, but most of us share in the experience of owning garments unsuited to our activities and environments. Velvet lounging pajamas owned by a girl who must help with the work of her home and has neither time for lounging nor a setting suitable for the luxurious fabric, swimming suits owned by the person who never swims, and riding jodhpurs prized by the girl who neither rides nor hikes—all are examples of purchases that violate a rule of fitness.

Aside from influencing the choice of articles, the environment and activities also affect the colors, the fabrics, and the designs thought suitable. The backless dress of bright colors and bold design may be pleasing and satisfactory for wear for the informal life of the seashore, bright with sunshine and gay with color. It is not suitable, even if temperature would permit, for wear in a decorous village of New England or in a

town of the Middle West, where gay camaraderie is not the chief note of life. Delicate blues and soft grays are totally unsuited to the needs of the schoolgirl, business woman, or traveler, whose life makes exquisite freshness desirable but difficult to maintain and flowerlike appearance not the note to be accented.

Sport clothes. The vigorous strides of the hiker, the smashing swings of the tennis star, the movements of the rider, make demands for a marked degree of freedom that must be considered in the choice of clothes if one is to get joy out of these sports. Today the active life of most girls makes the consideration of suitable clothes for one or more athletic activities of paramount importance in planning the wardrobe.

Traveling clothes. Travel, too, is a commonplace activity of the modern woman. By automobile, train, and airplane, women travel entirely without any hampering disapproval from society. Clothing suitable for traveling should be comfortable and yet have a certain dignity and reserve about it which will indicate that the wearer knows she is not in the informal circle of her home, nor yet on her way to the neighborhood store.

Travelers are often judged as experienced or inexperienced by their apparel rather than by their luggage. An example of this is found in the experience of a much-traveled woman who was misjudged because she was not dressed according to custom. She was to take a train after ten o'clock at night and, as she would go directly to her berth in the Pullman, she decided to wear down to the train the ruffled dimity dress which she had on at the dinner hour of that hot summer day. As she entered the Pullman, she was told where the dressing room was, how to ring for the porter, and various other details all familiar to the experienced traveler. She changed to her conventional dark blue traveling ensemble the next morning, and upon changing trains and Pullman received no further instructions, being accepted as an experienced traveler because she was dressed as one.

Clothes for social occasions. Because the modern girl goes to parties and dances, she still has occasion for the feminine garb which made up the most of woman's wardrobe years and years ago. Voluminous skirts that swish delightfully or wispy and wistful chiffons are unsuited to the busy, active routine of the day but come into their own for formal or informal evening wear.

Three important steps. Perhaps the relation of environment and activity to clothing needs can be most wisely determined if the following steps are taken.

1. List all the activities in which you engage, making marks to designate relative frequency of each.
2. List the garments you will need to be properly dressed for these occasions.
3. On this factual basis, decide what influence each of the separate activities in which you engage should exert on your total clothing choices.

SUGGESTIONS TO THE CLASS

1. Plan your clothes for a summer to be spent on a western ranch; on a northern lake; in a city; in a small town. In what ways are the wardrobes similar? In what ways different?
2. List the clothing necessary to take on a week-end trip to visit your friend who lives in the city; in a neighboring small town. What accessories should be included in each case?
3. Make a list of the unusual activities that will require a special type of clothes.
4. Suggest ways in which one's activities and mode of living may affect one's choice of color and texture of fabrics.

3. *What shall she wear for school and street?*

A wise selection of a dress or outfit for school or street would be based on the fact that in its creation due regard had been shown for the art principles. The following questions must be answered in the affirmative if the design is to be regarded as artistically satisfying.

1. Does the spacing present good proportion, pleasing by its provision for both unity and variety?
2. Does the design convey a pleasing sense of balance that enhances rather than detracts from the unity of design?
3. Is the color combination pleasing and interesting?
4. Does the design convey a sense of harmony?

Determining factors. If curved lines appear in one part of the design, they should be repeated elsewhere. If oppositional lines are used once they must be repeated elsewhere in the dress design. If a color is used, it must be successfully re-echoed. The design and the trimmings suggested should be in harmony with the material, style, and use of the dress. One would not approve of a design that used astrakhan fur on

cotton fabric or elaborate ruffings on a rayon or cotton school frock. The lack of harmony would be distasteful. If a dress design does not show full regard for the art principles, it would be ruled out as a possible choice.

In addition to being artistically satisfying, the dress design chosen should be selected with due consideration of the body areas of the wearer and the proportions they express. Do you recall what these areas are? Roughly stated, the first area is that of the head and neck; the next extends from the shoulders to the waist; the third area is from the waist to the widest part of the calf or to the line of the hem of the skirt; and the fourth area extends from that line to the sole of the shoes.

As has already been said, the character of these areas determines the line direction of an individual, and the relationship that exists between these areas establishes the proportions that must also be considered if a pleasing effect is to be created. If a person is short and stout, the body rectangles are shortened and tend to become circular. In this case the line direction of the body is horizontal. The body of the athletic young woman expresses a vigor and forcefulness that is well expressed in oppositional line direction. The structural lines of the dress design should be in accord with the structural lines of the figure, and yet of such character as to improve, if needed, the proportions of the body.

The color combinations presented in the design should be flattering to the wearer and pleasing to the eye. They should not be startling nor breath-taking. In the schoolroom and on the street, you wish to go about as a member of a group, not as an unannounced prima donna. Usually, a dress donned for school must be such that it can be worn through a school day. A dress that makes you feel unduly conspicuous because of strong colors or daring lines could scarcely be endured that long—hence it is unsuitable.

The next point is to determine how the fabric we have selected as suitable will affect our choice of a design. Of course there are cotton and rayon fabrics that are almost as luxurious as silk, and others that are like chiffon. We will rule these out of our consideration, since we are planning a dress suitable for school or for spectator sportswear. We may choose from among cotton, rayon, and wool fabrics for street and school wear, with due regard for the season.

The design should be suitable for such occasions as these terms suggest—simple, direct, and straightforward. Sweaters and skirts, one-piece dresses, and suits are desirable for school and street wear. Sweaters and blouses, as well as the skirt, may be purchased in the store, or may be



"Modern Miss"

On the way to school.

made in the home. The fad of knitting has enabled many girls to have several sweaters of their own make. Blouses are usually from a cotton or rayon material which is easily laundered. In addition to sweaters and blouses, most girls enjoy wearing jackets, which may be made of material like the skirt or from some other well-chosen fabric. The jacket is often worn over a blouse, thus giving added warmth which may be desired in the early fall or late spring.

Plain tailored suits are often worn for school and street. The suit jacket may be used to give the warmth desired for some seasons and may serve in combination with various skirts. Such suits, if carefully selected, may serve for several seasons, and thus justify the seemingly large initial expenditure of money.

Perhaps if one were to have a list of questions on the design for a dress or suit for school or street wear it would read like this:

1. Is the design simple?
2. Is the design appropriate to be worn where a dress of this type will be worn?
3. Is the design suitable to the individual in color combination, line direction, and in the proportions expressed?
4. Can a dress or suit of this design, made from fabric of the type planned, be readily cleaned or laundered with a minimum probability of damage in the process?
5. Does the dress design make necessary unusual care in keeping the garment in good condition?
6. Does the design seem suitable, considered in relation to the design or character of the fabric to be used?

Coats. For school and street wear coats should be made of a serviceable material such as tweed or camel's hair. The tailored coat with pockets and, if possible, rainproofed is always desirable. This again is the type of garment that, when properly selected, may be worn for several seasons.

Accessories. A beret or a simple soft felt hat is usually the choice of headwear. Many times hats may be had of the same material as the jacket, coat, or suit. Some girls enjoy wearing berets or hats of a bright color to emphasize some color in the ensemble. Scarves have been and now are very popular for headwear and no doubt serve a definite purpose. If you desire to wear a scarf, be sure the color is well chosen and that the scarf is placed on the head in a pleasing and becoming manner.

Galoshes and rubbers are necessary in the high school girl's wardrobe,

for protection to both the life and appearance of her shoes and her own good health. These too need careful thought in choosing, as many fads are placed on the market which neither add to the appearance of the feet nor protect the life of the shoe.

Gloves aid in keeping the hands in good condition and add greatly to the appearance of a well-groomed girl. Cotton, wool, or pigskin are usually chosen for school and street wear. Many times mittens are worn instead of gloves, and while they may not look as neat as gloves, they may give greater warmth.

Jewelry is not an essential part of the dress for the schoolgirl. However, a well chosen strand of wooden beads, pearls, or the "tricky" lapel pin may give a desired touch of color and serve to express the wearer's individuality. Simplicity is the keynote of a well-dressed girl for both school and street. This keynote, if observed, will direct her in wise planning of her clothes. Further details to be considered in purchasing are given in Unit 8.

SUGGESTIONS TO THE CLASS

1. Choose designs for a dress that is suitable for school or street wear for the girl who has large hips; square shoulders; round shoulders; a short, plump figure; a tall, slender figure.

2. Choose designs for two dresses that you would like to have in your wardrobe. Choose two materials that might be used to make up each design. Plan the trimming that would be required in each case.

3. Choose two designs from dresses that exemplify the art principles previously presented. Choose two designs for dresses that have disregarded the art principles.

4. Select designs for dresses that are in harmony with the personality of various members of the class.

5. Choose the garment design you would like to use in a construction problem. Bring to class samples of material which you think are suitable for this design. Do the design and fabric express your personality? Do they enhance your body proportions?

4. What shall she wear for active sports?

Today, active sports play a great part in the life of every American girl. Although each girl may not take part in all the various sports, she will find herself participating in some of them. She is, then, interested

in the question of the sort of clothes suitable for that activity and others related to it. Sport clothes should be so constructed as to provide for freedom of movement and bodily comfort, to afford protection from the weather, and provide a reasonable length of service. Among the common active sports in which girls engage are walking, swimming, golfing, tennis, skiing, skating, and riding.

For walking or hiking. These sports are by far the most common. Suitable attire for hiking includes slack suits, blouses and skirts, or one-piece dresses in which the skirts have a free and easy swing and are of such a length as to permit normal stride. The undergarments should be simple and few and so cut as to offer needed protection and allow for freedom of movement. The feet, of course, should be comfortably dressed. Socks for wear with low-heeled oxfords or saddle shoes are popular with the hiker.

For swimming. The one-piece bathing suit made of knitted wool is desirable for swimming, as it furnishes warmth, allows for free movement, and retains its shape. Lastex is a material which has been satisfactorily used in combination with silk, rayon, or cotton for bathing suits. Swim suits may be obtained in woven cotton and rayon fabrics that resemble gingham, percales, and other fabrics, yet sometimes are water repellent. These are made up in quaint "little girl" styles and are particularly becoming to the younger set. A rubber cap to protect the hair and ears is worn with the bathing suit. Many girls wear rubber shoes to protect the feet from pebbles and give an added note of color to their appearance. For beach lounging, a bathrobe or cape of cotton terry cloth or a huge beach towel of similar weave is highly desirable.

For golf. Golfing is a sport involving walking and vigorous movement of arms and body, with periods of relative quiet. For spring and fall girls who golf enjoy wearing sweaters and skirts with ample swing. In the summer they choose a tailored shirtwaist dress with free-action sleeves and back or a play suit with shorts affording equal freedom of motion. A sweater or jacket is desired as a part of sportswear for golf. Comfortable shoes are essential to golfing, and the oxford type, worn with woolen or lisle anklets, is usually the choice. The scarf or beret is commonly chosen for headwear.

For tennis. This is another sport demanding freedom of the whole body. Many girls choose the halter and shorts as wear for tennis. We also find the jumper style of dress, having neither sleeves nor back. The tennis player should provide herself with a cape, jacket, or



Bloomingdale Bros., Inc.

Whether the game be archery or tennis, clothes for action foster your skills.

cardigan to use between sets or after the game to prevent chilling following such violent exertion. Short socks and flat-heeled shoes are used for footwear, while a band or a scarf is used to hold the hair in place.

For winter sports. Skiing, a sport common in cold and snowy locations, requires clothes that afford protection from cold and wet. The common costume worn for skiing looks very much like the hooded snow suits worn by children, or it may well be likened to a Dutch boy's pantaloons worn with a jacket and hood. It is made of a warm, heavy, water-repellent fabric. Heavy shoes, well waterproofed, worn with wool hose are necessary for this sport, as are lined leather gloves or warm woolen mittens.

Skaters also find ski suits highly desirable. Some girls wear slacks or culottes, which are divided skirts, for skating. These can be worn with sweaters and give freedom of movement. In some localities the favored skating costume is composed of a fitted bodice of woolen fabric with a short, full circular skirt of the same material worn over woolen tights of a contrasting color that is somehow repeated in the trim of the dress. Special shoes lending protection to the ankles and worn with wool hose are essential. Scarves, toboggans, or pointed hoods are popular headwear. Warm woolen mittens are also needed.

For riding. Horseback riding calls for jodhpurs or breeches and boots, if one is to be really well dressed. The shirt worn with the breeches is usually made of cotton, wool flannel, or jersey. Some may prefer to wear sweaters in place of shirts, or a pair of jeans in place of breeches or jodhpurs. A matching coat or a leather or wool jacket is a necessary part of the rider's dress for cool days. In this sport, the season of the year will determine the weight and kind of material chosen for the outfit. The choice of headdress for riding varies widely. In some places a kerchief is tied over the head. In others, a soft felt hat meets with favor. The derby, once regarded as essential to the well-dressed rider, is being jostled out of first place in popular acceptance.

SUGGESTIONS TO THE CLASS

1. From the department files select pictures of clothes you would like to have for the active sports in which you participate. Figure the cost for the clothes selected.
2. Contrast clothes worn for sports a century ago with those you wear today.
3. List the items to consider when buying sports clothes. Will this be the same for all members of the class?

5. What should the girl wear for lounging and sleeping?

Periods of relaxation and rest are a necessary part of every normal life. Relaxation may be accomplished by lounging in your own room, leisurely reading a book, or listening to the radio. It is sometimes a time for intimate and informal family confab. This may be on the porch on a warm summer evening or in front of a glowing fire on a winter night. One essential to successful relaxation is to know that you do not need to be on your guard for fear of being misunderstood, yet you safeguard your dignity. You are in your own home, with those who know your desires for self-expression. Are strong colors, splashy designs, or long swishing dresses your secret passion? If so, lounging robes may provide this enjoyment without hazarding your reputation for good taste or throwing doubt on your soundness of judgment.

Successful relaxation depends partly on your mental state, partly on your physical condition, and partly on your clothes. If your clothes are tight, restricting the body, you will find it difficult to relax. If they are bunglesome and clumsy, you are also uncomfortably aware of your dress and find difficulty in being at ease.

Lounging apparel. Suitable clothes for lounging must be comfortable in cut, made of well-chosen material, and of a design pleasing to the wearer. The lounging apparel may be well tailored, as the flannel or terry cloth bathrobe; it may be frankly feminine, as the lace-trimmed dotted swiss negligee with a ribbon sash; it may be a compromise, as the flowered piqué housecoat; or it may be colorful pajamas. Material for the lounging garments should be chosen according to the season and should be of such a character as to suit the design of the garment and resist undue wrinkling. The flannel robe, flannel pajamas, or slacks are desirable for winter lounging or for informal leisure. Robes, slacks, or pajamas of rayon or cotton crepe are most popular for the fall and spring. Sheer cottons made according to a somewhat frilly style vie with the percale or seersucker housecoat for the summer season. The cotton and rayon garments can be cared for in the home, which makes them desirable from the standpoint of economy and cleanliness. The garment should be kept in good condition. It should be as clean as the apparel over which it is worn. Lounging garments can be purchased or made at home, as you choose. In either case, personal taste may be permitted wide freedom of expression in the choice of fabric and design. If you wish to indulge in a note of color or find

pleasure in a design showing purple cows on a green field, you will find it safer "to break forth" with such plans in your lounging apparel than anywhere else. It is a relatively safe place to experiment with new and different ideas. If you are choosing a robe for someone else, as your mother; you would not be free to experiment with color and conspicuous design to the same degree.

Sleeping apparel. Sleeping garments present almost as wide a range of choice as lounging apparel. The choice first must be made between gowns and pajamas. This is a matter of personal taste. Frilly or tailored garments of either sort may be obtained. Some girls will want gowns made with ruffles and lace, while others will want the plain, tailored percale pajamas. The material from which sleeping garments are made should be soft and smooth, durable, and easily laundered.

For summer wear, gowns may be made of such cotton fabrics as voile, batiste, seersucker, and crepe; for winter wear, in homes where cold sleeping rooms are the rule, knit garments are perhaps the most common choice. Outing flannel and brushed rayon garments are also widely used. The sleeping garment, whether gown or pajamas, should be roomy enough to give freedom of movement; yet it should follow the body lines so as not to be bunglesome.

Suitable footwear. Mules, sandals, and slippers are chosen for lounging. The choice should be made in harmony with the type of lounging garment selected. Many people assume that everyone sleeps barefoot. Such is far from the case. Many girls who like to sleep on a sleeping porch or under light covers are enthusiastic about knitted socks or pull-on slippers as nighttime foot covers.

SUGGESTIONS TO THE CLASS

1. From magazines in the department select pictures of lounging garments that would be suitable for the average high school girl. Give reasons for your choices.
2. List the points to be considered when selecting lounging garments. Do the same for sleeping garments.
3. List the garments and the cost of garments for lounging and sleeping that you need for one year.

6. What shall she choose for dress-up clothes?

The occasion. The choice of clothes for dress-up wear involves decisions on several points. First, the girl must decide the kind of occasion

for which she will need dress-up clothes. Does she go to church? Does she attend afternoon teas? Is she beginning or continuing to "date" so that she has need for a date dress for after five? How frequently does she go to dances or parties—not really formal parties, yet ones of such a nature as to make a long, somewhat tailored dress desirable? How often does she go to a formal dancing party at which she would really wish a low-necked evening dress? Honest answers to these questions will direct the girl to a sound basis for determining her need for dress-up clothes. She may say, "I go to church every Sunday, summer and winter, rain or shine. Occasionally, someone has an afternoon party, but in my town we rarely wear anything but school clothes to such affairs. Our evening parties, too, are informal, so I never had a chance for an evening dress until our junior-senior prom." Another girl may say, "I go often to church and to afternoon teas almost every week. We go downtown for dinner at one of the hotels a couple of times a month, and mother likes us to dress up for that—long dresses, you know. I often go to my brother's school for his fraternity parties so I have to plan for that or he isn't pleased. I think I need several silk or silklike afternoon dresses, a couple of long informal dresses, and lots of evening dresses a year."

Closely related to the sort of life each girl lives is the money she has to spend for her clothes. Both the number and detail of her dress-up clothes are determined in part by the money in her purse and the skill in her fingers. Of course, the care she gives her clothes is a means of extending or expending her money. We will consider this in more detail later, but it might be advantageous for you to begin to think about the matter of care and its effect on the life of clothes now.

The design and fabric. After a decision has been reached on the sort of occasions for which a girl needs dress-up clothes, there comes the interesting question of what designs and what fabrics are most becoming and suitable for this specific girl and also what will prove to be the most successful when combined with the rest of her wardrobe. Adult women may say, "I am this or that type of person." Girls may not speak positively about what types they are, as they are still in the process of becoming a personality and developing into a type. So in their dress-up clothes, as in their school clothes, they usually find it wise not to attempt to emphasize too strongly this or that phase of their shaping personalities.

Fabrics chosen for dress-up clothes should be in keeping with the mood of a somewhat different-from-usual occasion. For afternoon

wear, the fabrics usually chosen are somewhat practical and conservative, even though they are more luxurious than those selected for workaday wear. Silk and rayon crepes are favorites, although velveteens, wool crepes, and certain cotton fabrics, such as batiste, voile, and dotted swiss, have high favor in their own seasons. For evening wear, frankly luxurious fabrics are preferred. Velveteens, crepes, and taffetas are usual favorites for the winter months; and nets, dotted swisses, organdies, and marquisettes rate high for spring and summer selections. Inexpensive and attractive fabrics are available for the skillful fingers of the girl who can sew to make into dresses of her own creating. The choice of a design for the dress-up dress for afternoon or evening should follow the general principles of good dress design already presented on pages 48-54. Often the school coat leads a double life serving its owner not only for daily wear but for dress up occasions. A dress coat, pleasing in color and texture, and well designed is desirable.

Coats and hats. The girl who goes to many formal parties will want an evening coat to wear with her evening dresses. There are many interesting ones from which she may choose. For evening wear, the fur cape is luxurious and surprisingly warm; the wool jacket, sparkling with sequins, has its own charm, as does the black velveteen or faille coat. For a summer wrap, an unlined cape or jacket merits popularity.

Hats for afternoon wear are somewhat more dressy versions of the brimmed felt, the toque, or the straw chosen for street wear. For evening wear, a bit of net or lace and flowers or fur is regarded as right at the moment for formal occasions when a hat is in order. Formal evening dress usually does not require a hat.

SUGGESTIONS TO THE CLASS

1. From the classroom files, select three dress-up outfits that would seem to meet the needs of a high school girl in your town. Write a paragraph describing each selection made and presenting the occasions for which it should be worn.

2. From a fashion magazine, such as *Vogue* or *Mademoiselle*, select a dress-up costume that seems too extreme for a high school girl to wear in your community. Describe the costume and give your reasons for regarding it as unsuitable.

3. Describe the sort of evening dress that might suitably be worn under each of the following evening coats: a boxy white piqué jacket; a long velveteen coat; and a white bunny cape.

7. How should accessories be chosen?

Accessories are articles of apparel that complete the costume. One immediately thinks of a hat, shoes and hose, gloves, handbag, handkerchiefs, and jewelry as necessary parts of certain if not all types of costumes. In fact, some of these articles are almost as basic as the dress or suit itself. Such accessories have been worn by people back through the centuries. A glance into any book dealing with historic dress shows that for as long ago as there are records people have used accessories. They have adorned their heads, have hung decorative objects around the neck or waist, have devised more or less elaborate covering for their feet, have decorated arms and hands, and have carried in their hands such articles as fans, muffs, handkerchiefs, umbrellas, or handbags.

The girl of high school age usually finds accessories less important than her older, more sophisticated sister. She does not care to be encumbered with things that may interfere with the free use of her hands. She has learned that for many occasions the accessories worn by older girls and women are mere time-consumers for her and can well be dispensed with. She should, however, not overlook the importance of accenting or toning-up the costume chosen for street, afternoon, or party wear. Even the school or sports costume can be "picked up" by adding amusing modern bits of costume jewelry that may be had for little cost. But be wary of your choice. Accessories may either make or mar the ensemble. Let us be sure that they express a definite idea and are in harmony with the costume with which they are worn. If accessories provide the bright spots to a costume, it is well to limit the number of such accents to two. White hat and gloves are in good taste with your navy spring coat. But if you add a white purse, white shoes, and a white flower for your lapel, the effect would be spotty. In fact, you could thus lose the whole idea of accenting the blue coat because the white would so nearly dominate the effect. The rule of two accents is sound. Learn to limit yourself to the use of a few well-chosen high lights, and thus assure yourself that good taste is expressed.

Accessories are often classified according to the purpose for which they are intended. There are those suitable for school, for sportswear, for street, for afternoon or informal party wear, and those for evening wear. If the wardrobe is simple and the amount of money available is small, it is possible for one set of accessories to serve several purposes. The hat, purse, and shoes intended for street wear may well be worn with afternoon costume if care is taken in their selection. Also, many



Hats should be related to the lines of the face and hair to be becoming.

girls use the same accessories for school and for spectator sports. For the girl on a more liberal allowance, there are endless possibilities for introducing variety in her accessories and for displaying her ingenuity for combining them with the basic parts of her wardrobe. Care must be taken that these additions to the costume say but one thing at a time. If you are in doubt as to the unity of an effect, eliminate rather than add. And be sure that your accessories become you!

Hats. Hats are worn as a protection to the head and the hairdress and as a frame for the face. Because of this, hats must be related to the lines of the face if they are to be becoming. Straw, linen, faille, piqué, and taffeta are regarded as materials suitable for summer wear. Felts, velours, wool fabrics, and velvets are among the materials used for fall and winter hats. Antelope and suede are also popular. At the present time, felt in a wide variety of colors and weights is regarded as a fabric suited to hats for any season.

Every high school girl will need a sport hat. This type of hat is always simple in line and has little or no trimming. This is usually a simple band, perhaps a small bow or a feather. Such a hat is designed to stand much wear. Often a sport hat has a brim but it may be merely a calotte, a "beanie," or a beret. Sport hats for summer usually have a brim to provide shade for the face. A sport hat may be worn with a street or school costume if the lines of the dress or coat are simple and tailored. Either a brimmed hat or a pillbox is worn for dressier occasions. Whether the hat is large or small, it should be essentially simple and becoming. The well-dressed girl avoids those elaborately trimmed with flowers or a veil, and depends upon good line and beauty of material for desired distinction.

Occasionally, for some formal affair, such as a church wedding, a girl may need a formal hat. These are usually small, often elaborate, and may be made of the same material as the dress or of some rich fabric, such as metal cloth or velvet or of flowers. Hats of this sort are not worn to dinner in a private home but are appropriate to wear if attending the theater or if dining in a public place where formality of attire is in order. Whatever the type of hat you may be choosing, be sure that it is becoming and right for the clothes with which you wear it.

Footwear. Shoes and hose are immediately suggested by the term footwear. Let us consider also foot covering to wear in your own room and forms of shoe protection.

Shoes that are satisfactory for general wear by the high school girl are usually some form of a sturdy sport shoe. Low-heeled, broad-toed,

comfortable oxfords or moccasin style shoes are generally popular. Many are two toned—either two values of tan or brown, or tan, blue, or black combined with white. If the clothing allowance is liberal enough to provide for several pairs of shoes at a time, a girl may indulge herself in sport shoes that are striking in color combination. But if the budget allows for few fads, she should content herself with less conspicuous brown, blue, black, or all white. Such shoes are usually made of calfskin, heavy suede, elkskin, or crushed calfskin. Recently a great variety of canvas and other fabric sport shoes have been worn in summer. These may be had in many colors and are often merely a sole with straps enough to hold it in place on the foot.

Spectator pumps are a little less casual than the flat-heeled oxford. Their use is limited to spectator sports or tailored costumes because the material from which they are made is sturdy, and the lines in such shoes suggest combination only with other tailored lines. Alligator, calf, heavy suede, or buck are often used in these shoes.

Semidress shoes are desirable for wear to church and for such occasions as call for a simple crepe or other type of afternoon dress. These should be low-heeled and simple in design so as to suggest youth. High heels are inappropriate and will prove to be a hazard in any effort to attain good posture. Kid and crushed leather are used for all seasons. Gabardine and patent leather are popular especially for spring and summer and suede is worn for fall and winter. Whatever the material in the shoe, whatever its style, whether an oxford or a pump, the semi-dress shoe will be lighter in construction than the sport shoe. If one pair must serve for all seasons, black or brown kid is a good choice. If two pairs are possible, perhaps one will be white and the other dark.

Evening shoes are usually sandals but they may also be pumps. Even for her evening shoes, the high school girl, as a rule, prefers fairly low heels. Materials used are fabric, metal cloth, or gold or silver kid. Gay colored sandals are often used to accent black, white, or a delicately colored dress. If care is used in the choice of color, the same shoes may be worn with several dresses. Gold or silver colored sandals are also a conservative choice because they can be combined with either winter or summer dresses.

Hose. The school costume permits a great degree of casualness in the choice of hosiery. Whether long hose or anklets are in vogue, the school or sports costume calls for the same expression of sturdiness in hosiery as is desired in shoes. Lisle or service-weight hose in silk, rayon, or nylon are always considered appropriate. Cotton or rayon anklets have been

popular for the warmer months, and some girls have chosen wool for winter. Long socks and even full-length stockings in a fancy rib effect are sometimes the choice. Care should be taken to harmonize the color of hose with the shoes and the rest of the costume. Many times they match the color of the sweater. Anklets are a real economy but not everyone wears them becomingly. The girl whose legs are overplump will do well to conceal their size with full length hose in a suitable color. Legs kept smooth and free of hair are a "must" when anklets are worn.

Long hose, sheer in texture, are worn for dress. At the present, various tones of beige, sun tan, and soft dark brown are the usual choice of color, whether the basic color of the costume is black, blue, or brown. Dark, sheer hose in colors to match the costume are sometimes worn. Good taste demands that hose have a shadowy tinge so that the covering of legs does not become too conspicuous a part of the whole ensemble. Hose made of crepe twist yarn are duller of texture and are more serviceable than those made of lightly twisted yarn. Silk and nylon hose are readily available. Whatever the fiber, the appearance desired is much the same: smooth, clear, and sheer. Sheer hose are fragile and must be given only such wear as garments of this description are designed for.

House or bedroom slippers. Slippers are needed for lounging and for bedroom wear. They may be made of fabric, are often heelless, and may be little more than soles with straps to hold them to the feet. Fur-lined moccasins are often enjoyed for winter wear. Bedroom slippers are not intended to be worn for housework. They are inappropriate for wear with a gingham house dress. A utility dress calls for utility footwear and appears much better combined with comfortable sports oxfords than with shoes intended for other purposes.

Galoshes. Protection against rain and snow is needed if shoes are to wear well and are to be kept neat and trim-looking. Even if the need for keeping shoes dry on the basis of health were overlooked, it would still be important to have galoshes to maintain the good appearance of one's shoes. Leather does not withstand repeated soakings without becoming stiff and stretching out of shape. The style of galoshes changes from time to time. They are made in colors or in white and are sometimes trimmed with plaid or with fur. White rubber boots have been popular. Whatever the design, you will need a pair of galoshes or boots to prolong the life of your shoes.

Raincoats. A raincoat is an important accessory to the wardrobe of the high school girl. If she owns a showerproof utility coat, the matter of

protection against rain or snow is taken care of. These utility coats are often reversible, one side of tweed or novelty plaid and the other of specially treated rainproof cotton twill. But if one of these all-purpose sports coats is not part of her wardrobe, a coat that is specifically intended to shed rain is needed. Raincoats may now be had made of a windproof and showerproof cotton fabric. Others of oiled silks, plastic treated fabrics, and pliofilm in a wide variety of colors are also available. Umbrellas to match may be had also.

Handbags and purses. There is a wide variety of handbags and purses from which one may select those suitable for her costumes. The shirred silk bag, the beaded bag, and the bag of metal cloth are suitable for evening; the bag of suede, antelope, or faille is proper for dress occasions; and the heavy leather purse with inner pockets is just right for school and street wear. It is good practice to choose bags that are related to the main color harmony of the wardrobe. By keeping this in mind, fewer bags are needed and better quality than would be possible otherwise may be had. Faddish bags, extreme in style, fabric, or decorative detail, are to be avoided. It is well to match the material of the bag with that of the shoes, especially if both are leather.

Gloves. Gloves come in a wide variety of lengths, styles, and materials. The short slip-on glove, in either leather or fabric, is popular for street wear with either suit or coat. Gay knit woolen gloves are widely used for school and sportswear; and leathers in mocha, suede, kid, or glaze kid are counted desirable for dress wear. No one accessory can contribute more to the immaculate, well-groomed look—so desirable for street and for more dressy occasions—than spotless white gloves. There are so many kinds of leather used in gloves, each kind having certain characteristics that influence its choice, that a study of the choice of gloves will be presented in Unit 6, "Guides for the Shopper."

Handkerchiefs. Handkerchiefs may be had in all colors, in many sizes, and in a variety of fabrics. If a colored handkerchief is desired, it should be selected because of its effectiveness in carrying out a color scheme. Among the colorful printed handkerchiefs there are some really lovely color combinations and pleasing prints; then there are others that are striking but garish. Knowledge of the art principles should be applied to the choice of so simple a thing as a handkerchief, if one would make the purchase contribute to the pleasing effect of a costume. Handkerchiefs in colored prints are suitable for dress wear and for sports. Whatever the type of handkerchief combined with the

ensemble, it must be fresh and clean. A grimy handkerchief shows a failure to place proper attention on the details of a costume.

Collars and scarves. Neckwear may contribute much to a costume in softening the lines about the face and neck, in completing the line of a dress design, and in introducing color accents. Dickeys, either with round or convertible collars, are worn with sweaters or dresses. Freshness of collar and cuffs is of prime necessity.

Belts. Separate belts in either leather or fabric are used for color accent on school or sports clothes. If the belt is of leather, it should be like the leather of the shoes. Be sure that the idea suggested by the belt harmonizes with that of the dress or skirt. A sturdy leather belt with its brass buckles found effective with a tweed dress will add nothing to a rayon crepe street dress. In fact, it is well to question whether the addition of the fancy belt is really desirable to anything but the basic dress for which it was intended.

Jewelry. In the choice of such accessories as beads, bracelets, clips, pins, rings, and the like, one should not let enthusiasm for the new and modish lead one to wear so many ornaments as to suggest either a savage in full war regalia or a Christmas tree fully trimmed. Asking oneself such questions as the following will aid in making a wise choice.

1. Is this suited to *me*, the wearer?
2. Is this article suited in color, design, and texture to the costume with which I plan to wear it?
3. Does it show consideration of the season?
4. Is it appropriate for this occasion and this time of day?

Consideration of age is important in the choice of jewelry or gadgets worn, quite as much as in the style of one's dress. The high school girl's jewelry usually represents little real worth because she will wear no precious stones. Her choice is a pin or bracelet of plastic, a strand of wooden beads, or a simple gold or silver chain with a locket. She often gives free rein to her imagination in the choice of lapel decorations. These fads are gay and short-lived. Earrings seem to belong to her older sisters, so the girl who attempts to select appropriate accessories does not include them. Unless the budget is liberal, care must be taken in the choice of even relatively inexpensive accessories to keep the money spent for them in proper relation to other more basic items.

Ornaments for the hair. The present vogue is for ornaments to adorn the hair. Perky bows and artificial flowers are widely used and even take the place of hats and caps for certain occasions. Pins and combs

have popularity from time to time. Any of these may be a finishing touch to the costume if appropriateness and harmony are kept in mind.

SUGGESTIONS TO THE CLASS

1. Bring to class the accessories you wear with your favorite dress. Describe the other dresses in your wardrobe with which these may be worn. Compare the cost of the accessories with the cost of the dress and the cost of the necessary footwear.

2. Prepare a display of accessories that will express daintiness; sturdiness; boldness; discreetness; somberness.

3. Members of the class may bring to school a number of costumes for different occasions, such as a white taffeta formal dress; a blue tweed suit; a red jersey dress; a beige linen street dress; a brown velveteen dress. Select the suitable accessories for each costume.

4. Helen has a simple gray tweed suit which she wears the year around. Choose the accessories to be worn with this suit that will suggest the idea of spring; that will suggest the idea of fall.

SUMMARY

You have seen that becoming dress for the high school girl is dependent upon several things. First, the girl must study herself to know fully and without any question her line direction, her shape, and her personal coloring. Then, and only then, can she hope to choose clothing that will complete her individual design. Further, becoming dress will be found to be largely made or marred by the attention and care the girl gives to her posture, personal grooming, and to the care of her clothes. A well-poised, clean body, well-brushed hair, carefully manicured nails, and sparkling teeth are basic necessities.

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Clothes for Every Occasion

Clothes that suggest a spirit of equality, clothes that are comfortable, clothes that provide freedom and are simple in line, and certainly clothes that are gay—these are the clothes of the high school girl today the country over. Good taste demands that there be no fuss. However, the simplicity must be relieved by a touch of color and an accent of interest to prevent monotony.

On the following pages are some costumes for various occasions that high school girls have chosen and have worn with high satisfaction.



The F. & R. Lazarus Company, Columbus, Ohio



Junior First Dresses



"Ladies' Home Journal"



Junior First Dresses



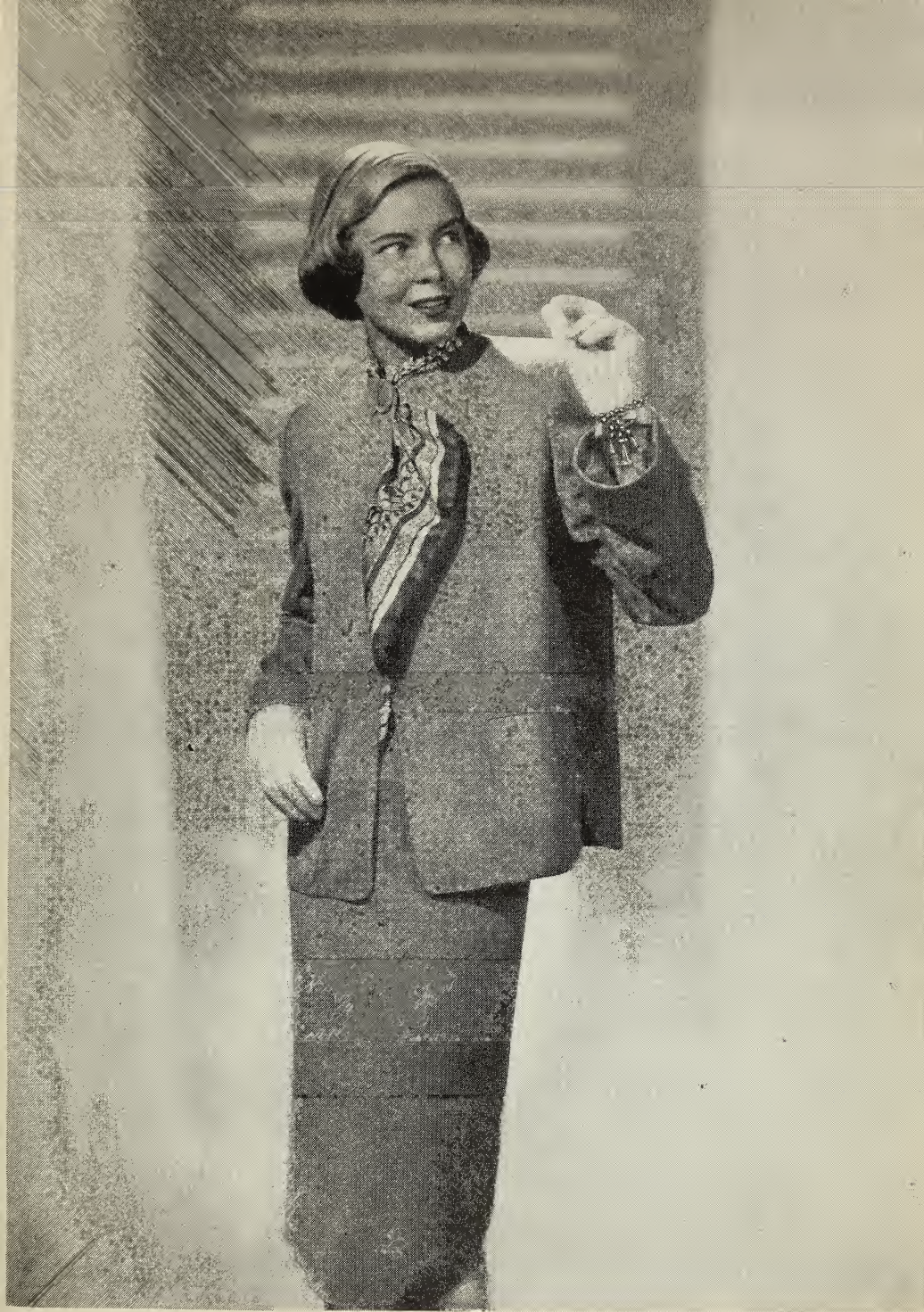
Koret of California



Designed by Stephanie



Nancy's of Hollywood



Nancy's of Hollywood



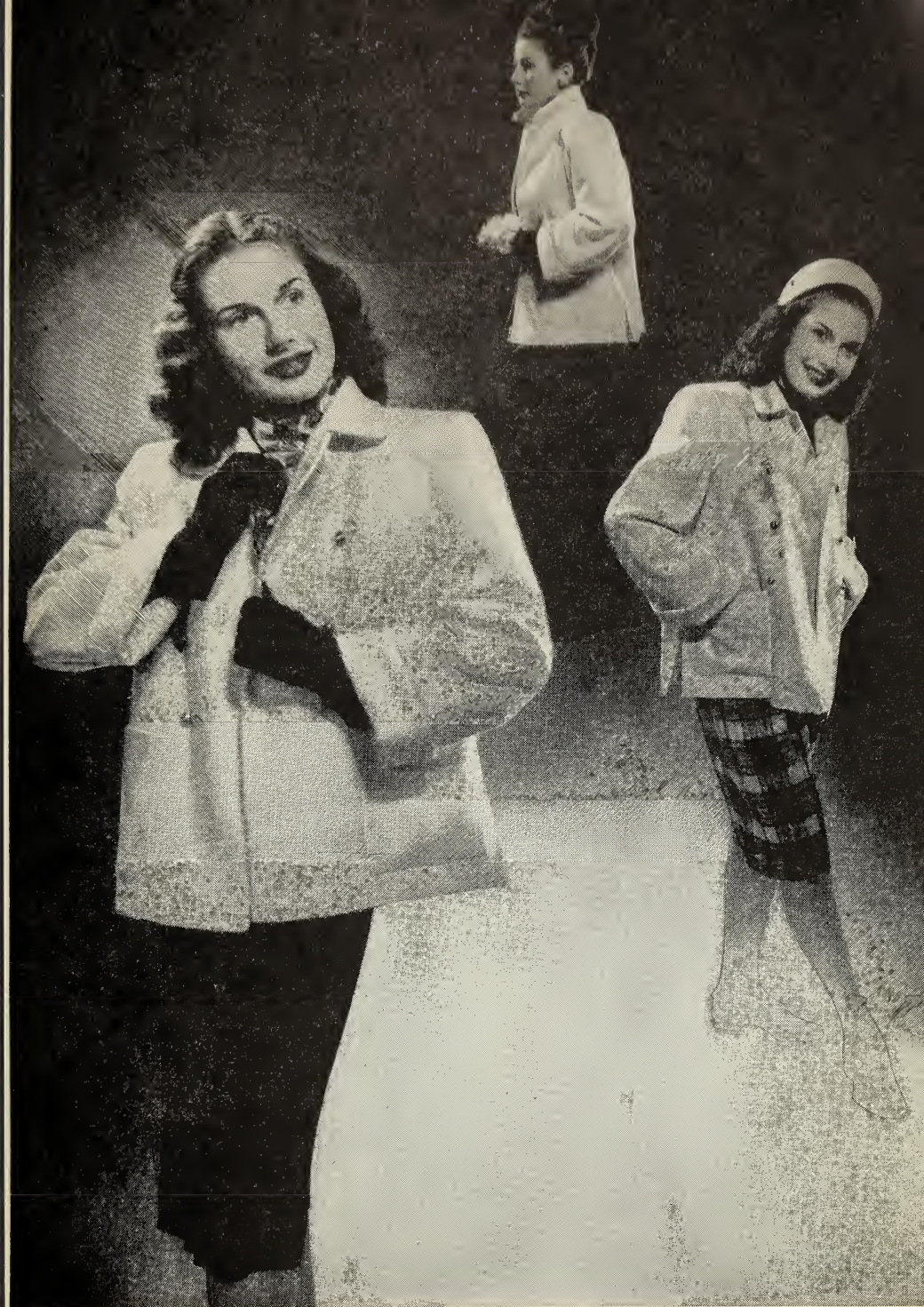
Nancy's of Hollywood



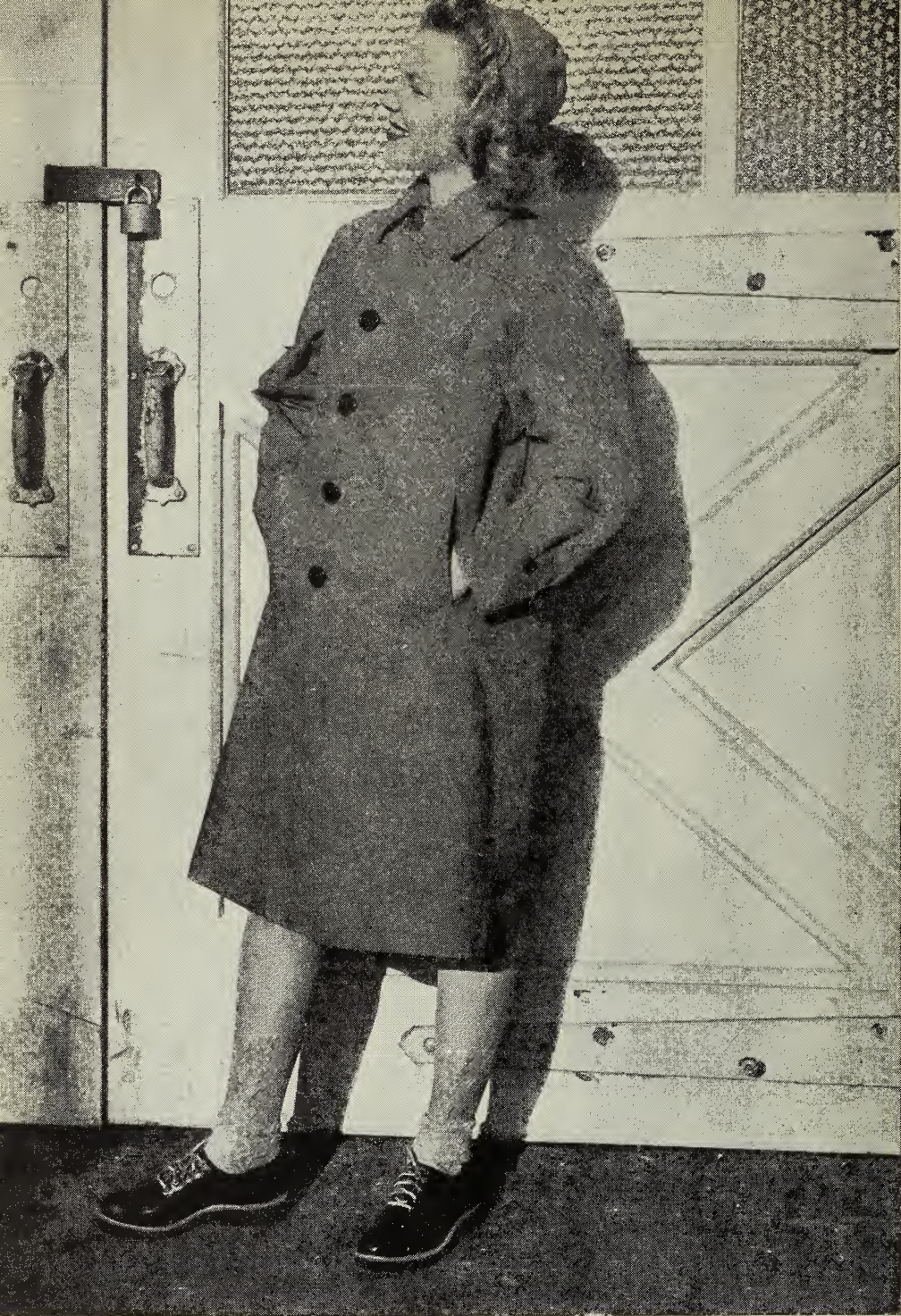
"Ladies' Home Journal"



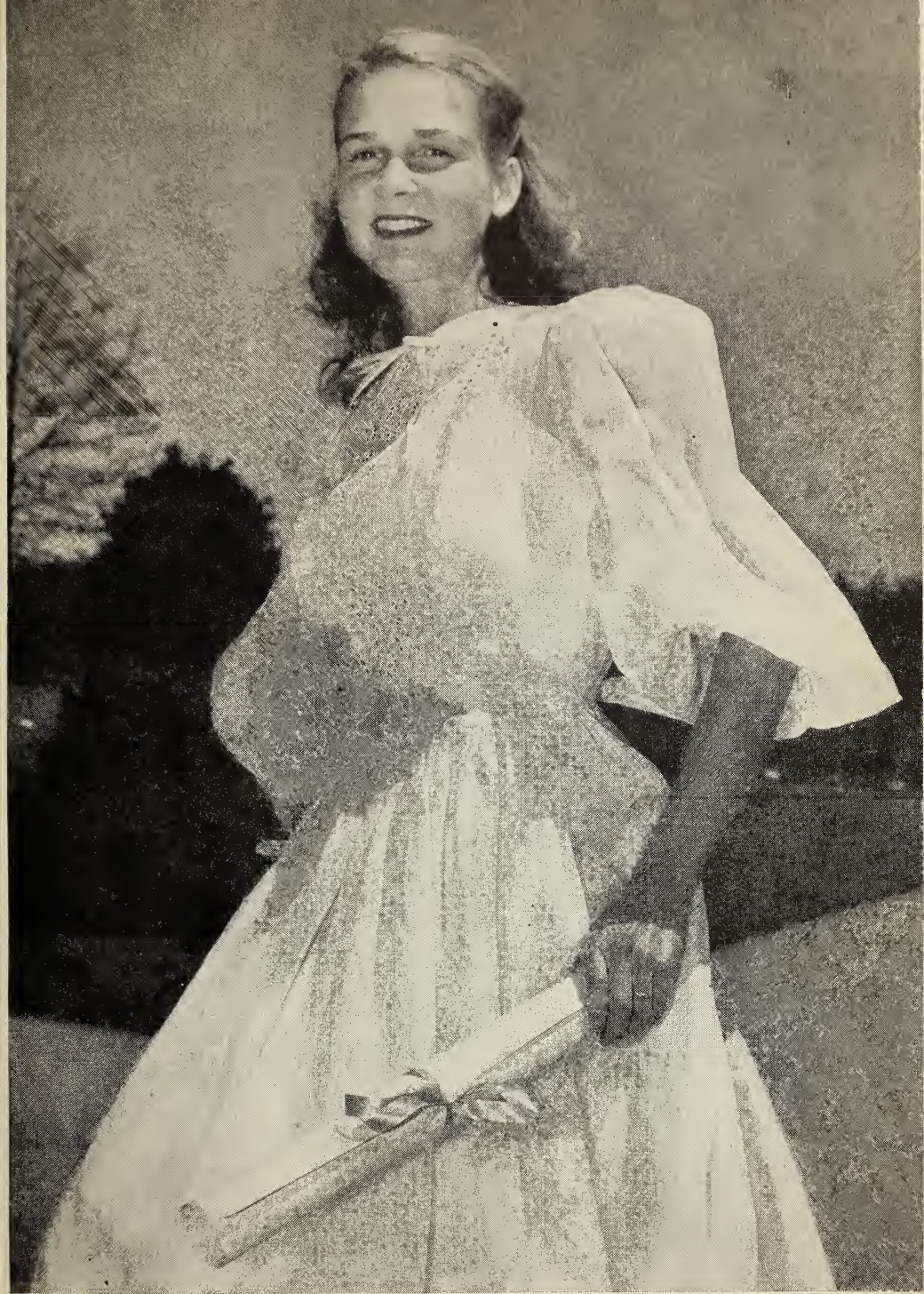
"Ladies' Home Journal"



The Higbee Company, Cleveland, Ohio



Talk O' the Teens Associates



Roger Coster

Section Two

SHOPPING FOR
CLOTHING

4

The Shopper and Her Responsibilities

Household production of clothing for all members of the family was the usual practice in colonial days. The thread and woolen fabric included on the shopping list of the girl of today were made at home. Every family had its spinning wheel and loom which were kept in almost constant use. Carefully made buttonholes and handmade buttons fulfilled the need which snaps and slide fasteners meet today. If sickness or other misfortune prevented a household from making the needed articles, these were obtained from neighbors by trading wood or corn for the needed yarns and fabric. Because the raw materials used were practically the same in all colonial homes and because the methods of making the yarn and fabrics were known to the girl, she had a good basis for judging their quality. Such is not the case in present-day shopping. Little if any fabric is made in the home. For the most part people do not know about the processes used in making goods. Neither do they know how these processes affect the quality of the material. For example, few of us have ever visited the factories and watched the several steps through which wool must pass in the making of a fabric. Even fewer understand what bearing each step has on the quality of the finished cloth. Inventions and discoveries have made the combination of wool with less expensive fibers easy and common. This is so cleverly done that the uninformed shopper will not recognize the combination of wool with cotton in the fabric shown her unless she carefully reads the label attached. You can see that it was much simpler for the girl of

colonial times to be fully informed concerning fabrics than for the girl of today. You can also see that although the modern girl is freed from the task of making fabrics, there are many other responsibilities that she must be able to meet if she is to be a good shopper.

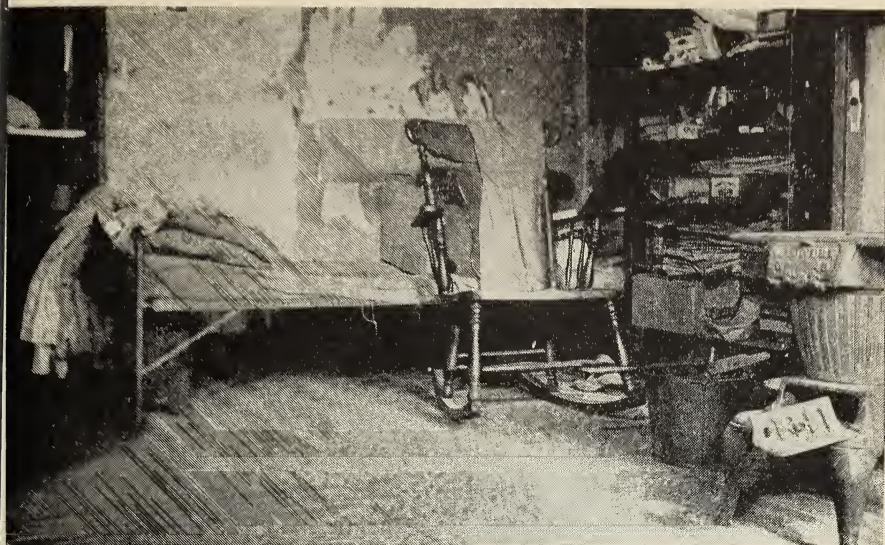
1. What are the responsibilities of the shopper?

The girl of today, off to the city with a shopping list and with money or her check book in hand, might not be aware that she has responsibilities other than paying for what she buys. She may be aware that she is responsible for buying at a price she can afford to pay so as to follow more or less closely her clothing plan. Her responsibilities are more far reaching than this. Their extent is best seen if we consider the matter further.

Obtaining good values. It is the responsibility of the present-day shopper to determine what is needed—that is, to make a shopping list with due regard for her clothing plan. It is also her responsibility to obtain good values at a fair price for the needs included in her shopping list. Pressure may be brought through advertising or by tempting displays to induce her to accept poor substitutes for real values. The buyer may be led by high-pressure salesmanship to extend her carefully prepared list of clothing needs beyond the limits of her clothing allowance. It is her responsibility to see that such change of her original plan does not occur.

Responsibility to others. Besides these responsibilities to herself and her family, the shopper has responsibilities toward others—toward society in general. What we buy determines what is produced. If we buy those things that are beautiful, factories will produce that which is beautiful; if we demand or accept ugly things of poor quality, these will be produced. Whatever they may be, the demands of the public will be met, and thus, through us, the character of the production carried on in our country will be determined. It is true that the demands of one shopper may seem of little force, but the demands of many shoppers surely exert great pressure.

Conditions of labor. The conditions under which goods are produced are indirectly the responsibility of the shopper. Desirable conditions include good sanitation, provision for proper lighting, protection against hazards, and assurance of safety. Further important condi-



U. S. D. A.

Before 1938 it was not uncommon for clothing to be made in surroundings such as this.

tions include employment of adults only, a fair rate of pay for the job, reasonable working hours, and the recognition that the worker is a person, not a cog in the wheel of the machine. Such conditions of labor prevail in many mills and factories in our country. The passage of the Fair Labor Standards Act in 1938, setting up minimum wages and maximum working hours for both men and women, has done much to improve conditions under which our textiles and clothing are produced. However, there are still some factories that may be justly described as places of sweatshop labor. Sweatshop labor was commonly done in the tenement room of the worker, and pay was so pitifully low that even the longest hours of work did not yield a wage sufficient for the necessities of life, not to mention the requirements for decent living.

The disgraceful conditions described in Thomas Hood's poem "The Song of the Shirt" are none too far behind us. Do you know this poem? Its refrain is,

Stitch, stitch, stitch,
In poverty, hunger, and dirt.
And still with a voice of dolorous pitch
She sang the song of the shirt.

No one can avoid having a sense of shame if he is profiting at the expense of others' happiness. It is thus the responsibility of the shopper

to demand that the goods she buys shall be produced under conditions fair to the worker. This requires willingness to pay a fair price, but that alone is not enough. She must demand that the goods she buys shall bear a label carrying the assurance that they have been produced under desirable conditions. In this way she may make her shopping serve not only her need for certain articles but also her need for sharing in the building of better social and economic conditions in her country.

Since the need for clothing the millions of men in our armed forces is no longer the most important demand made on the textile industry, consumers' goods are now being produced in greater quantities. Shortages are still with us, however, particularly in clothing of moderate and low price. Producers have, in some cases, found it more profitable to make higher priced articles so that those made to sell at a low price are not to be had in sufficient quantities to meet our needs.

We may expect prices of clothing to remain high since the wages of workers have been increased. The forty-cent minimum hourly wage established by the Fair Labor Standards Act has been far exceeded by such average earnings as 107.7 cents per hour paid to workers in the cotton industry in January, 1948. We may expect shortages in clothing until we have helped to relieve some of the war-torn countries and until those countries can again produce their own materials. We are still having to accept some substitutes. Further, the good workmanship that we once took for granted is, in many cases, not to be found. Some of the new developments in textiles and in clothing offer real improvements over goods bought in years past. Many purchasers believe that nylon for hose, as an example, is more beautiful and wears better than silk. It is our responsibility to become informed about these new materials and learn how to care for them. We must learn how to judge quality so that we can gain as much satisfaction as possible from our clothing allowance.

SUGGESTIONS TO THE CLASS

1. Show how an increased number of wants to be met from a definite income will influence the price of the articles to be purchased.
2. Compare the prices on staple and novelty articles of apparel.
3. Collect a number of advertisements that relate to clothing. Arrange these advertisements in groups according to the information that they give. To what extent do these describe the wearing qualities of the article? To what extent do they merely suggest that the article is fashionable?
4. Obtain from your civics teacher a copy of the federal law which regu-

lates hours of work and levels of wages. How do they compare for different sections of the country? Are they different for men and women workers?

2. What is the effect of demand for low-priced merchandise?

Desire for variety. We have seen that the shopper is largely responsible for the quality of merchandise available and, in a measure, for the conditions under which goods are produced. Demands for quality and for desirable conditions of production, although not all that is involved, do exert a powerful influence on the manufacturer. The desire of the shopper for variety in dress also influences the manufacturer. Its effect is to lessen quality. If four dresses are bought where two might really have been needed, it stands to reason that any one of the four may not be of as good a quality as if there were but two. Quality is often sacrificed for mere quantity. The demand for a good silk dress of such fine quality that it would serve for Sunday best for two generations has been replaced by the demand for *variety in dress*. The popularity of the five-dollar rayon dress, which is uncertain in quality and which gives little promise of service, is a product of the desire for variety. As a result of this change from emphasis on *quality* to emphasis on *variety*, the number of dresses purchased by any one person in a year has been greatly increased.

Waste resulting from fashion changes. This is not all. The influence of the demands of the shopper for variety in color and design in clothing fabrics, dress design, hats, purses, and even in gloves is shown in the waste resulting from a rapid change in fashion. You have seen the department-store tables loaded with unsalable skipper-blue fabrics when the popularity of the color had waned; the millinery counter crowded with hats left on hand when their fashionableness had passed; and perhaps hundreds of pairs of gay colored gloves marked far below cost because the demand of the public had changed.

Not only the owners of department stores but also the owners of even a simple wardrobe feel the effects of the demand for variety and experience some of the losses that always go with it. One of the ways by which people attempt to make up for these losses is by limiting certain additions to the wardrobe to as low a price as is reasonable with the desired variety and frankly accepting the idea that the service to be expected from such articles is brief. Have you ever heard a girl say, as she pointed to varicolored sandals or a flower for her hair, "Isn't this

smart? I only paid \$1.29 for it!" As you check her costume as assembled, you may find that it is made up of numerous faddish articles, each costing a seemingly low price and each perhaps to be worn a few times only. In such case, could you say she was inexpensively clad? Probably she has never figured the cost of her habit of choosing such articles, nor has she been able to see how spending too much for fads only means that she will have to do without some of the things she really needs. Often, too, she has nothing with which the new belt or flower for her hair combines well. Lacking taste she wears them anyway and looks freakish.

Effect on clothing trade. What other dangers do you see arising from such a practice? How may it affect the high school girl and her satisfaction from clothing? How may it affect the clothing trade? We may be sure that the demand for variety met by cheap and often tawdry garments will tend to cause lowered wages for workers and poor standards of working conditions.

If you face frankly the costs to be covered by every dollar of the purchase price of a garment, you will see that bad effects inevitably accompany the demand for low-price goods. Suppose we take the mythical average dollar expended for merchandise to see how it is divided among the retailer, the wholesaler, the broker, the manufacturer, and the cotton farmer or sheep rancher on whose property the raw material was produced. Government experts in economics tell us that the farmer receives about 34 cents of this mythical average dollar and that the manufacturer's share is some $28\frac{1}{2}$ cents, making a total of $62\frac{1}{2}$ cents for the principal producers. This includes transportation charges. The wholesaling process takes $8\frac{1}{2}$ cents more, and the retailing structure the remaining 29 cents, a total of $37\frac{1}{2}$ cents for the middleman's share.

It has been estimated that there are no less than seventy-two taxes hidden in the price of a dress and thirty-six in the price of hosiery. These taxes are charged up to the farmer, the manufacturer, the wholesaler, and the retailer; but finally they affect the selling price of the goods. Taxes are really paid by those who buy and consume the goods.

Let us trace this dollar a bit further, using as our example a cotton dress. The price paid for the fabric by the dress industry should be enough to present a fair return to the cotton planter who grew the fiber and to the many pickers who picked the cotton fluff from the opened bolls. It should cover fair prices for the workmen engaged in changing the cotton fiber into cloth, and a fair rate of return to the man who owns the mills and the equipment used in the manufacture. The price

must cover the transportation costs and provide a reasonable profit for bringing the cotton to the mill and taking the fabric from the mill to the cutting rooms where it is made into dresses. Other costs to be met in the production include expenditures for heat, light, water, gas, telephone, telegraph, and postal services—all necessary in the business.

The textile mill may find it necessary to advertise. Then there will be the additional charge to be covered as the advertisement announces the charm and desirability of "Golden Dawn Fabrics" or whatever trade name may have been selected. The executives in the industry must receive salaries, and their offices must be maintained. If a reduction is made in the cost of the production, where do you suppose it will fall? Some may be due to new and improved practices. Usually reductions in the market price result from reductions in the price paid the farmer and in the wages of the employees rather than in returns to the mill-owners or in advertising rates.

After the fabric is received at the garment factory it is cut, sewn, finished, and marketed. This requires labor, a place for the work to be done, and the investment of money in the business which should return a fair rate of interest to the owner. It also requires money for transportation charges and payment of salaries to executives and others engaged in the management of manufacturing and marketing of dresses.

We demand many services of the retailer, such as luxurious appointments, highly trained clerks, and a convenient location. The cost of these too must be included in the "average dollar" spent in the store.

Effect on the worker. Even though the price at which the cotton dresses are being sold is close to the production costs, a reduction may be attempted. Pressure is exerted on all persons interested in production and marketing which tends to cause a lowered wage for the worker and poorer conditions under which the work is done. The farmer and the laborer are, in general, least able to withstand this pressure even though lowered production costs are usually pushed on them. To sum up the matter, the result of one's desire for variety and for low-cost goods must be considered and curbed in the light of one's interest in the welfare of others. Only as we seek to understand the relation between our wants and the lives of others can we improve conditions in America.

Stable demand for certain garments. Among certain types of garments, such as undergarments and aprons, the desire for variety is not as strong as the desire for low cost. This situation tends to create a relatively stable demand, permitting the standardization of designs and the quantity production of garments. This results in a standardization

in price. Special sales, of course, may alter the price of such garments as dresses, coats, and suits whose chief worth lies in their introduction of variety into the wardrobe.

SUGGESTIONS TO THE CLASS

1. List the factors that have brought about the desire for a variety of clothes.

2. Luella Bales has only herself to care for and receives a salary of \$150 per month. She buys a crepe dress for \$7.95 which has been made in the shops where workers receive the minimum wage. Has she met her social responsibility? What does the cost of a ready-made garment include?

3. Determine from library references dealing with conditions in textile mills and retail stores what changes, if any, need to be made in working conditions. How may you as a consumer help bring these about?

4. Determine what regulations have been set up for hours of employment for women workers; for children. (Write state labor department.)

5. Report on Great Britain's plan for meeting the demand for low-cost, ready-made clothing under wartime conditions.

3. *What services may the shopper expect of the retailer?*

Wholesale and retail. The yards of fabric produced in the mills may be sold *wholesale*—that is, in large quantities—to men in the ready-to-wear industry to be made up by their workers into garments; or it may be sold wholesale to the representatives of department stores and specialty shops to be *retailed*—that is, sold in small quantities over the counter. Cloth merchants, interested in the sale of bales upon bales of cloth, will not bother with sales of a quarter of a yard of this or that, or even a sale of ten yards; nor does the manufacturer of dresses wish to take orders for one of this or that model. Hence it becomes necessary in the marketing of goods of various sorts to have retail stores where the shopper may examine fabrics, dresses, or other garments and at her leisure decide upon her choice. There is a marked difference between the price charged by the retailer and that which he paid the producer. Sometimes this difference is 100 per cent or more. Sometimes people say, "Outrageous and sinful the way Bonzo's store charges! Why, you can get the same things out at a little shop on 159th Street for just a fraction of what Bonzo's charge!"



Wm. H. Block Co., Indianapolis, Ind.

Spacious aisles, deeply carpeted, elaborate interior decoration, and other evidences of luxury characterize the modern retail shop. The cost of the setting must be figured into the bill the buyers pay.

Services of the large department store. Let us attempt to list what the charge made by the large department store represents in services. First, the store must be situated in a location that is convenient to the shopper. Second, it must be well-kept, often with heavy pile carpets, artistically pleasing walls, ample counter space, and other necessities for the storage and display of the stock in trade. The physical plant must be kept fresh and clean, the elevators must be kept running, the air conditioning must be in order, ice water must flow unceasingly, and an information desk must be maintained.

In addition to these services, the department store must furnish rest rooms, writing rooms, and toilet rooms for the convenience of its guests. Many stores provide the services of a personal shopper. It must have a parcel checkroom. One New York store has carried the checkroom idea a step further and has a baby carriage checking court where a liveried attendant accepts the carriages and their contents for safekeeping, giving in return a check. He jiggles the carriage to restore peace and quiet to those babies who are beginning to protest Mother's lengthy absence. Huge trucks make the rounds of the city once a day, giving free delivery of purchases. Under normal conditions a special delivery service is maintained to give speedy delivery on packages desired at once by the purchaser. Advertisements daily announce the sales featured by the

store and present the merits of brands or trade-named articles carried by the store.

The shopper expects that there will be intelligent, well-informed, well-groomed, courteous clerks ready to give her needs and desires prompt attention. Regardless of whether she enters the store in the relatively quiet hours of the morning, in the rush of the noon hour, or at that last minute before closing, the shopper assumes it is her right to have immediate attention. A large force of clerks must be on hand to provide for the prompt service expected by the shopper.

When a purchase is made, the shopper may desire the extension of credit; thus the purchase can be made at the moment, whether she has cash in hand to pay for it or not. Extension of credit is another term for charge accounts. The opening of a charge account is expensive, for it requires that a system be installed through which may be obtained, from banks, employers, and other agencies, statements as to the ability and willingness to pay promptly of those desiring to open such accounts. Then monthly statements must be sent, records of payments must be accurately made, and in some cases—where payments are not made as agreed—the costs of collection of the debt must be borne by the retail store. Payment of monthly accounts was affected by a recent ruling of the Board of Governors of the Federal Reserve System. This ruling, made effective July 10, 1942, and continued until November 1, 1947, required that all open accounts be paid in full by the tenth of the month. This measure was intended to stabilize credit. The merchant benefitted by not having to carry long-time accounts; purchasers benefitted from the restraint which a ruling placed on those who were likely to overspend their income.

When a purchase is made, the shopper expects that the store will stand back of its merchandise. She expects that, should the color fade or the fabric be less durable than the advertisements of the store lead her to expect, the purchase price will be refunded or the article will be replaced. She expects also the privilege of taking goods out on approval—a practice which the store finds expensive to maintain.

Services of the little shop. The little shop does not have the expense of maintaining a location convenient to the shopper, it offers no special services, and it does not attempt to maintain a luxurious atmosphere. Its business is conducted on a cash-and-carry basis, and it may have a sign saying, "Because of the character of ready-to-wear goods, absolutely no guarantee is given on sales made in this store." It may pay for no advertising, but rather depend on the sales appeal of its window display for interest in its special sales and in its regular stock.

Do you see that what we expect of the retailer influences, even if it does not determine, the price we pay for various articles?

SUGGESTIONS TO THE CLASS

1. Relate instances in which the salesperson was able to give you valuable information concerning some clothing fabric or some ready-made garment that you were interested in purchasing. Relate instances in which the salesperson was unable to give such information. Under which condition are you more likely to buy?

2. Suggest the facts that you would like to know about a cotton fabric. What are the possible means of gaining this information, other than through the salesperson?

3. Visit a number of stores and consult the manager or personnel director to find out what the requirements are for the personal appearance of his salespeople.

4. Describe what you consider an ideal retail establishment. What services do you expect it to extend to its customers? Which of these add most to the cost of doing business? Which the least? (See "100 Problems in Consumer Credit," Pollak Foundation, Newton, Mass., 10 cents.)

5. Find out from several retail establishments in your town how much it costs to maintain a delivery system. What are the requirements of a good delivery clerk?

6. Compare the price of a fur coat sold for cash with that of the same one sold on the installment plan. What rate of interest would you have to pay on such a transaction?

4. What are good buying habits?

We have given thought to the many expenditures that the large retail store makes to give the shopper what she may term "normal service." We know that if some part of this service were to fail, many among the crowd of shoppers would have much to say about the inefficiency of the store and its management. Yet, shoppers themselves are, at times, most inefficient. So far as anyone knows, however, there has never been a case reported of a shopper publicly condemning herself because of her inefficiency! If the shopper is to use the services of the store to best advantage she must understand for what they are intended. Shopping should be not merely a leisure-time activity. The whole place of business has been set up so that people who are there to buy may have their wants met with courtesy, efficiency, and in comfort. The shopper in turn should give her attention to the task at hand, know what she



Mrs. Helen Ankeny

These girls are off to the annual meeting of the Future Homemakers of America, the national organization for girls taking home economics in high school.



Mrs. Helen Ankeny

Clothes which are appropriate to the occasion contribute to a feeling of ease. Good buying habits, which are discussed on pages 123-129, will help you to select clothes appropriate to every occasion.



Mrs. Helen Ankeny

Registering for an organization meeting such as that of the State Future Homemakers of America is often times a new experience for the high school girl.



Mrs. Helen Ankeny

Such social experiences as meeting prominent people are welcomed by all girls. Here the girls are being greeted by a governor's wife in her home.

wants or can have, and with due courtesy to the salesperson, should complete the transaction in as little time as possible. The girl who has good buying habits uses her own time and energy profitably to obtain what she desires. She also is considerate of the services offered to customers by the store.

Courtesy. What would you place first in the list of desirable shopping habits? Certainly if you were a saleswoman you would think first of the habit of dealing courteously with others. The impatient shopper who announces, after a brief wait, that she hasn't "all day to spend and why doesn't the store get some live ones so people can be waited on sometime in their natural lives," stimulates by her lack of courtesy a discourteous retort from the saleswoman. She may find her shopping attempts made difficult because no one wants to wait on a troublemaker, and so she is passed on from saleswoman to saleswoman as rapidly as possible. Her own discourtesy has cost nervous energy and has led to disappointment and wasted hours.

The shopping list. Second in the list of desirable shopping habits should be the practice of making and using a shopping list. Such a list may be made to express one's needs and to indicate the relation of the mode or fashion to those needs. For example, the shopping list may read:

1 blue tweed coat without fur, leather buttons, not over \$35

1 felt hat to match, not over \$3.50

1 pair blue shoes—sportswear—not over \$6.50

1 pair pigskin gloves (advertised at \$1.50)

The detail as to color, buttons, and lack of fur has been decided upon from fashion notes. With such a statement of her needs in hand, there is no occasion for the shopper to spend time looking at fur coats, lounging robes, or riding breeches. She *knows* she wants to look at blue tweed coats of the given price range, and she proceeds to do so. She may have to forego the leather buttons or make other concessions, because the store cannot supply what she asks for, but in every way the possibility of getting what she wants is greater because she knows what it is.

Adherence to the list. This brings us to the third desirable shopping habit, keeping to color, type, and cost as established in the clothing plan. It matters more to the shopper than it does to anyone else that she be able to meet all her clothing needs with due regard for comfort, durability, suitability, and artistic worth. The saleswoman may be happy to sell her a green tweed coat of good fabric that has failed "to move"—

that is, to be sold—and may speak enthusiastically about the fineness of the fabric. The habit of staying with her shopping list may save the girl from a purchase that would require all new accessories before she could complete a pleasing color harmony with it.

The habit of staying within the price limits her plan has provided is equally important. The expenditure of \$15 more than planned for a coat may make it necessary to do without a much-needed dress. It is easy for the saleswoman to say, "Only thirty-nine dollars for this little model," but it is hard for the girl who is shopping to change her clothing plan to provide the additional \$10 that this price exacts.

It may be that a shopper will find that she has not allowed enough in her plan for certain items. In such case she should wait to make her purchases until she can change her plan. Possibly she will find the best way to secure the desired garment at the price she can afford to pay is to wait until the mid-season sales, when the reduced prices will bring the garment within range of her clothing plan. Possibly, if her need is urgent, she will find that it is wiser to buy the coat at the higher price and wear her present formal another season, or else to buy fabric and make her school clothes at home instead of purchasing them ready-made. The point is that her shopping habit should be such that she will never make a purchase which throws her clothing plan into confusion, but will always postpone a purchase until she can think through what adjustments may be wisely made in her plan.

Buying on quality basis. Another habit which every wise shopper should be encouraged to follow is that of buying as much as possible on a quality basis. She will always look for labels to find out if the quality is that desired. She will ask concerning the kind of fiber, the color-fastness, the probable shrinkage, the thread count, and like points when these bear on the quality of her purchase. This habit is not only a help to the shopper as a consumer, but it is also a help in bringing about an adequate system of labeling. Such labeling may eventually take the guess out of shopping.

Avoiding the store "rush hours." The wise shopper finds it desirable to plan to do her shopping at the times when the stores are least busy. By this habit she automatically assures herself prompt and unhurried attention; she is able to get the use of a fitting room and a fitter immediately, if these services are needed, and she saves herself from the fatigue that always results from being pushed and shoved about in a crowd.

Obtaining information. Another habit which contributes to successful shopping, particularly at times when special rates are held, is that of obtaining complete and accurate information as to *when, where, and what*. One woman tells of time-consuming trips to the basement, and the fourth floor, the eighth floor, and then the main floor for a special sale of smocks. She arrived at eleven o'clock only to learn that the sale was scheduled for two in the afternoon. She reported at two o'clock and worked her way through the pushing crowd about the smock counter only to learn that the smocks on sale were sizes 38 to 44. She required size 16. One such experience should lead any shopper into habits of attention to the details of the special sales of desired articles.

Developing shopping habits. The development of desirable shopping habits takes time and repetition. It requires constant self-discipline to bring a shopper to the point where her actions in a retail store could be described as wholly desirable. There is, of course, as much need for becoming efficient in shopping as for the store to be efficient in retailing. Working on desirable shopping habits really ought to challenge each of us.

Buying within one's means. The girl who selects goods with the intention of buying them has assumed a financial responsibility; that is, she has not only indicated that she wants these goods but also that she can pay for them. Purchases made for cash recognize this responsibility fully. You buy only if there is money in your purse. There is an equal responsibility for credit extended. When purchases are charged to your account, care must be taken to assure yourself that the total of the expenditures during any one period do not exceed the amount available for spending for this same time. It is easy to say "Charge it," but the amount must be paid in full at the end of the month.

SUGGESTIONS TO THE CLASS

1. Show in what way the out-of-town shopper adds to the retail price of merchandise when she requests (a) that the store furnish her with adequate care for her three-year-old daughter while she buys; (b) that the store ship a rug on approval to her home 60 miles distant, and later returns it; (c) that a gift package be carefully wrapped to be sent to a friend in a neighboring town.

2. You have decided to buy a brown dress, but when you are shopping for the dress you find a bright blue one at a bargain price. You buy the blue dress; but when you stop to consider the accessories on hand, you find that what you have calls for a brown dress. Has your purchase been a real bargain?

3. You have a definite clothing budget planned for this season, with a certain amount set aside for each article. The saleslady, by means of flattery and persuasion, leads you to buy a dress which cost \$7 more than the amount allowed in your budget. What effect will this have upon your other purchases? Will this in any way affect your mother's wardrobe?

4. Louise is an unusually tall, slender girl. She has waited until late in the season to buy a winter coat. What difficulties may she meet? Do you know of any instances when it was advantageous to buy at this time?

5. What are the results of poor buying habits?

To the shopper. First of all, there is an actual loss of money if your shopping habits are not sound. When you buy without gaining all of the information available, or choose on the impulse of the moment, disappointment is bound to result when these goods are put to use. Poor buying habits also develop a feeling that you are not capable enough to make your own choices, and you tend to rely upon someone else for every decision. Such a feeling of ineffectiveness will be reflected in your character. You tend to become more undecided as time goes on rather than to develop into the person sufficiently independent to make your own choices.

To the nation. Poor buying habits are more far-reaching in their effect than merely upon you as a buyer. Mistakes multiplied many times affect the local market and in turn our national economy. American people have been called the most wasteful people in the world. A large share of this waste has been due to poor purchasing habits. Buying without a carefully laid plan, without first making sure that the garment fits or that the color matches, results in disappointment and finally in replacement of the garment before a reasonable amount of service has been given. Buying goods that cannot be used results in personal unhappiness and loss of money.

To the merchant. When we realize that our purchase "just will not do" we may attempt to return it to the store. This means inconvenience to the shopper and probably serious financial losses to the merchant. Returned goods are said to cost from 31.8 to 61.6 cents for each returned article. Many times merchandise has been damaged while in the possession of the customer, and people lacking in honesty have been known to wear an article of clothing and then return it. Even if it is returned in perfect condition, a sale has perhaps been lost. Besides, it should be

remembered that store employees must be paid to take care of records of sales and returns, and these costs either represent losses or are added to the price asked for goods.

In fact, this practice of first buying goods and later deciding whether they really meet a need has become so troublesome that national companies are being urged to lessen the resulting waste. Stores have reported that customers return from 10 to 15 per cent of the shoes bought and from 25 to 40 per cent of women's coats.

Poor buying habits and lack of judgment are not alone responsible for the many returns. Merchants and their salespeople must take part of the responsibility. When goods are damaged in packing or delivering, when the wrong size is sent, when customers are overurged to buy or to "take it out on approval," the fault lies with the store and its methods of selling.

Recognizing that much could be done to lessen the returned-goods evil, the National Consumer-Retailer Council has prepared a chart showing what the store could do and what the customer could do to reduce the number of returns. Do you see how important it is to have a plan for buying, to read the labels, and to try on garments and examine them thoroughly before buying?

SUGGESTIONS TO THE CLASS

1. Prepare for class discussion accounts of instances of goods returned to the merchant. List the reasons for returning. What could the store have done to reduce these returns? What could the customer have done? Compare the reasons given for returning goods that apply to clothing with those that apply to household linens.

2. May Kennedy orders by phone two pairs of nylon hose to be sent to her home. She gives the brand name, color, and size desired. When the hose are examined, she finds that she has been sent the shortest length rather than the longer length which she must have. The hose are returned by the store's delivery service and the proper length sent out to her the next day. If each delivery costs 10 cents, and the return transaction 35 cents, what proportion is this of the selling price?

3. Inquire from your local merchant what he does with goods sent on approval that are soiled or damaged when returned. Who pays for such losses? Who should pay?

4. List six or seven good buying habits that you and your family can develop that will tend to lessen the amount of goods returned from your home to the store.

RETURNED GOODS CHART

*Prepared by the Customer Abuses Committee of the National Consumer-Retailer Council
8 West Fortieth Street, New York City*

REASONS WHY MERCHANDISE IS RETURNED	WHAT THE STORE CAN DO TO REDUCE RETURNS	WHAT THE CUSTOMER CAN DO TO REDUCE RETURNS
1. Wrong size or poor fit	<ul style="list-style-type: none"> a. Check sizes when merchandise is received. b. Train salespeople in fitting. c. Insist on fitting. d. Provide adequate fitting facilities. e. Sell only proper size. f. Provide size cards. g. Standardize sizes. h. Modify size range. i. Carry complete range of sizes. 	<ul style="list-style-type: none"> a. Carry record of sizes required by, or body measurements of, members of family. b. Try on apparel whenever possible. c. Refuse excessive alteration. d. Work for standardization of sizes. e. Be realistic, not vain, about own size. f. Compare size in different makes.
2. Not suitable or not becoming	<ul style="list-style-type: none"> a. Train salespeople in suitability. b. Educate customers. c. Train buyers in style. d. Provide better lighting. 	<ul style="list-style-type: none"> a. Study herself. b. Study clothes and style. c. Exercise restraint. d. Apply well-considered principles of color and style.
3. Not as ordered	<ul style="list-style-type: none"> a. Maintain adequate order system. b. Train salespeople and non-selling people in system. c. Check orders. d. Notify of changes. e. Interview persons responsible for errors. f. Give adequate information in advertising. g. Provide daylight lamps. 	<ul style="list-style-type: none"> a. Give full information when ordering. b. Keep record of transaction. c. Ask for complete information. d. Read advertising carefully. e. Match color in daylight. f. Give second choice in making order.
4. Damaged, defective, or poor quality	<ul style="list-style-type: none"> a. Buy on specifications. b. Test purchases. c. Label properly. d. Sell informatively. e. Explain limitations of merchandise. f. Pack properly. g. Check errors on delivery. 	<ul style="list-style-type: none"> a. Read the labels. b. Ask about and recognize the limitations of merchandise. c. Follow instructions as to use and care of product. d. Learn to buy wisely.
5. Purchased on approval	<ul style="list-style-type: none"> a. Discourage approval selling. b. Provide fitting rooms. c. Maintain assortments. d. Encourage conclusive selling. 	<ul style="list-style-type: none"> a. Understand cost of buying on approval. b. Make decisions at store. c. Insist on fitting of apparel. d. Avoid duplicate purchases. e. Carry adequate information about size, color, etc. of product wanted.
6. Delayed delivery	<ul style="list-style-type: none"> a. Keep promises. b. Notify customer of all delays. c. Set up adequate system to check on delivery dates. d. Avoid overselling. e. Provide adequate system training. 	<ul style="list-style-type: none"> a. Read labels. b. Do not exact difficult and unreasonable promises. c. Carry correct addresses. d. Understand the limitations of store systems and service.

RETURNED GOODS CHART (Continued)

REASONS WHY MERCHANDISE IS RETURNED	WHAT THE STORE CAN DO TO REDUCE RETURNS	WHAT THE CUSTOMER CAN DO TO REDUCE RETURNS
7. Lower price or better selection elsewhere	a. Remain competitive. b. Keep basic stocks. c. Justify differences in prices. d. Control copies of designs and styles.	a. Understand nature of copies of design or style. b. Understand quality differ- ences of goods. c. Notify of intention to cancel.
8. Changed mind, either don't like or can't afford	a. Train adequately. b. Label adequately. c. Justify prices. d. Sell informatively.	a. Make up mind before buy- ing. b. Read labels. c. Know goods. d. Get advice in advance of purchase.

6. What are desirable codes of ethics for the retailer and for the shopper?

Your behavior, whether in the class room, in sports or in a store, is a reflection of you. Usually, this behavior under different conditions is so much alike that people, observing you, will say, "That is how I expected her to act." They are able to say of some girls, "Her code, the values that she holds high in her innermost self, prohibits cheating or unfairness"; or, "She could not misrepresent the truth in any situation."

Ethics of buying and selling. We cannot here even if we wished to do so write out statements of right action that would take care of all situations in which a high school girl finds herself. Such statements of right action might be called your code of ethics.

Many books have been written on ethics, and still more books have been written on the values men seek and the way the search continues. We are concerned here with only a small part of the wide problem—that dealing with relations between one person and another when one would buy and the other would sell. How must each govern himself in this contact if he is to hold to the principles of right action? The two will have contact with each other, and both will desire to hold the other's full respect. There are two individuals involved in this contact, and fairness to both, rather than advantage to one, should be sought.

The codes. Truth should characterize all statements, both direct and implied. Both the buyer and the seller should assume responsibility for the articles sold. The retailer should be responsible for the goods being as labeled, and for their being delivered in good condition. The buyer

or shopper should be responsible for his purchase and for his treatment of the goods after the purchase is made. Perhaps if these general statements could be arranged in order, they might read as follows:

The Retailer's Code

The Shopper's Code

- | | |
|---|--|
| 1. I have respect for the personalities of those who come to this store, and shall deal with each with the simple courtesy which is an expression of respect. | 1. I have respect for the personalities of those who serve me in this store, and shall deal with each with the simple courtesy which is an expression of respect. |
| 2. I desire that fairness shall characterize every transaction, and shall direct my efforts that such may be the case. This will require an honest statement of values, acceptance of a reasonable profit, and the maintenance of good faith with the customer. | 2. I desire that fairness shall characterize every transaction in which I have a part, and shall direct my efforts that such may be the case. This will require prompt payment of debts and an earnest effort to keep articles handled in good condition, or accepting the responsibility for damage done. |
| 3. I recognize that errors are made in the filling of orders and in the other phases of the transaction of business, and approve of a limited policy permitting the return of goods not to the buyer's liking. | 3. I recognize that very frequently shoppers will select articles which they do not expect to keep, and order them sent out. I believe this unfair to the merchant, and pledge myself to use the returned-goods privilege only with reason and fairness. |
| 4. I believe honesty is the best policy. | 4. I believe honesty is the best policy. |
| 5. I recognize the importance of the consumer in our nation's business, and shall not knowingly attempt to exploit her. | 5. I recognize the importance of the merchant in the industrial scheme of our country, and shall not attempt to defraud him. |

SUGGESTIONS TO THE CLASS

1. List instances of courtesy shown to the shopper by salespeople; instances of discourtesy.
2. Observe a number of shoppers and note evidences of good breeding shown.
3. Observe a table of articles marked "Half Price." List reasons for this price reduction. Were there instances in which the goods had been placed

here because of careless handling? How does the merchant protect himself against these losses?

4. Sarah and her mother are shopping in a near-by town. They visit three stores where Sarah's mother has charge accounts. After looking at party dresses for Sarah in each store, they finally have two from each store sent out on approval. What losses may the stores suffer because of this type of buying? What do Sarah and her mother need to consider to improve their buying habits?

SUMMARY

In the complex social and economic world of today the problems of supplying our wants differ widely from those of earlier days. Today we have the problem of obtaining articles to meet our needs, but we take no part in their manufacture. We must find the desired quality, but we lack the experience that would make us good judges. In the midst of many interests we must keep in mind the needs we planned to meet by our shopping.

As consumers whose purchases make the markets, we are responsible for the quality of goods produced, for the conditions under which the work is done, and to some extent for the wages the workers receive. In our demand for low-priced goods we tend to put stress on the weakest links in the chain of production and distribution. In this chain the links of the farmer-producer and the millworker are the two most incompletely forged, and hence the stress of lowered prices tends to work the greatest hardship at these two points. One's demand for variety and for low-cost goods must be considered in the light of one's interest in the welfare of others.

Our demand for services from retail stores is often far greater than we realize. The retail price of articles bought in a store must be large enough so that the day's sales will pay not only the wholesale cost, the cost of selling as such, and a legitimate profit, but also for all the various services required, such as free delivery, charge accounts, returned-goods privileges, waiting rooms, announcement of sales by advertising, and others. We expect intelligent, informed, and courteous salespeople, interested in our requests and eager to serve us.

If we are to bring to the store the degree of efficiency we expect of it, we must attempt to develop desirable habits as shoppers. Included in such a list would be the habit of courtesy, and the habit of knowing what it is that we are shopping for. In other words, we should seek to develop the habit of using a shopping list that states our needs and re-

lates them definitely to desired fashion trends and to the money allowed by our clothing plan. The habit of holding to these requirements is important even if this causes delay in making the planned purchase. The habits of buying on a quality basis, of buying when the store is least busy, and of utilizing available information about the store all help the shopper as well as the store. By the establishment of such habits, one may become that rare creature, an efficient shopper.

5

Guides for the Shopper

We have learned of the many responsibilities the shopper must carry. We know that these responsibilities must be carried by each of us. Choices will be difficult to make, and the problems to be solved are many and complex. We want each decision to be as nearly correct as possible. Like tourists in a far country, we seek guides and guidebooks that will direct us on our way.

1. How does personal experience serve as a guide in buying?

Value of experience. All of us have heard the old saying, "Experience is the best teacher." Most of us have noticed the importance given to experience in the requirements of the various positions listed in a "Help Wanted" column: "Experienced typist," "Experienced saleswomen," "Housemaid, experience required," and "Dress fitter, experience necessary." It would seem that *experience* is a necessity in our present-day world. The requirement of experience is made in the belief that by practice at a definite task any person gains knowledge from what he does and from what he observes. It is supposed that the experienced person approaches a familiar task more efficiently because he has done it before. Experience is supposed to be related to the task at hand. Experience as a typist would afford little advantage to an applicant for the position of dress fitter. Long years of experience in laundering would scarcely form a good background for catering. The word "ex-

perience" is commonly used to mean successful mastery of a given subject or task.

Experience in shopping. It is difficult to build up adequate experience in shopping. What the purchaser found true yesterday in shopping may not be true today or next week. There are so many different articles sold. The methods of manufacture may change almost overnight, with a resulting change in the desirability of the product. New fibers are constantly being introduced that affect the price range of various fabrics. Style trends may make *this* material undesirable and *that* fabric good.

Your own doubt about placing reliance on experience as a guide may have been expressed in some such instance as this: As you were planning a trip to the city, by yourself, for an important purchase of new draperies for your room, or of a new coat or a dress, your mother may have said, "Oh, I do wish you would take Aunt Sarah with you! She has had so much experience in buying!" Of all the things that you did not want on your adventure in shopping Aunt Sarah's presence was the most undesirable. If you were successful in evading it, you may have thought as you rushed to the train, "How many hundreds of years [an exaggeration, of course] has it been since she bought linen? When did she pay over fifteen cents a yard for draperies? What does she know of style for coats? I'd look a sight in one she selected." Perhaps when you entered the store with its great array of fabrics you wished for a wider background to guide your choice, if not for Aunt Sarah.

Things to be gained from shopping experience. What might you expect this wider background or experience to afford you as a guide? Perhaps the first thing would be knowledge as to what relation usually exists between price and quality. Your Aunt Sarah could tell you that there is a lack of uniformity of prices paid for the same articles in different stores, or perhaps even in the same store, from week to week. She



Imperfections in weave and dyeing are easily detected when the fabric is examined in the bright sunlight.



The equipment required for the burning test is a small piece of fabric and a candle.

could explain to you that goods sold in fancy packages are also usually for sale without the wrapping at a lower unit cost. Perhaps she might even have pointed out, as you passed a counter on which rayon yard goods were displayed, that there were other fabrics which laundered better, were more durable, and were much less expensive than the fabric that was the favorite of the season. Such knowledge is general, gained from continued personal experience, and serves as a guide to the shopper.

Judging and testing. Usually, in addition to such general information, the shopper possesses other information which is more or less reliable. She may be able to rub a piece of muslin between her fingers and dislodge the fine white powder that was used to give the fabric body or weight. She notes on inspection that the rubbed part seems sleazy and thin. Thereafter, sizing is associated in her mind with fabrics of an undesirable quality. As the saleswoman unrolls a fabric for examination, she may note an unevenness in the yarns of which the fabric is made. Personal experience has taught her that cloth having such unevenness wears less well than that having a firm evenness of weave. If she has bought certain articles frequently, such as sheets, pillowcases, Turkish towels, hand towels, and the like, and has kept records of their service, she has a basis upon which to choose. It may be related to certain qualities of the fabric, as bleached or unbleached, yarn count or number of yarns each way per square inch, and fiber, as linen or cotton. Such information will be truly helpful to her in making further choices among these same fabrics. But should the fabrics on the counter change, her basis for judging durability or satisfaction is no longer useful, and she must again learn how well they wear by actual use before she can speak with authority concerning the relative worth of the fabrics.

Because so much time is involved in actual service tests, many shoppers have tried to make certain tests serve as short cuts in gaining in-

formation about the fibers used in a fabric, the degree of twist, the amount and kind of weighting used, and similar facts.

Certain of these tests are simple and easy to carry out, if a small sample of the fabric is available. Common among these are the appearance of the fabric, its feel, its creasing, and its response to rubbing. Other tests include the breaking and the burning tests. The recent development of special finishes and the present practice of combining two or more natural fibers or mixing them with synthetic fibers make the use of simple tests of little value.

Identification of Fibers in Fabrics

Appearance

1. Pure dye silks hang in soft, closely draped folds, and have elastic draping quality.
2. Weighted silks hang in stiffer folds, have more bulk than pure dye silks, and look heavy.
3. Synthetic fibers, used alone or in combination with other fibers, simulate the qualities of all of the natural fibers. The three rayons—viscose, cuprammonium, and cellulose acetate—used alone have individual qualities which may be modified by the weave or finish. Cuprammonium resembles the soft texture of pure dye silk. Viscose may hang in stiffer folds much as weighted silk, and a specially treated cellulose acetate greatly resembles wool in its appearance.
4. Wool appears dull and heavy; it does not fold as does silk.
5. Linen is usually lustrous, pleasing.
6. Cotton, unless the finish changes the surface, appears dull.

Creasing

1. Pure dye silk scarcely creases.
2. Weighted silk creases badly, and it is almost impossible to press out the creases.
3. Rayons, unless specially treated, crease easily and the creases tend to stay in.
4. Wool scarcely creases, but if it is mixed with much cotton, the creases stay.
5. Linen, unless specially finished, creases easily; the creases are sharp.
6. Cotton creases, but not to the extent that linen does.

Feel

1. Pure dye silk is very soft, crumples into a small space without becoming particularly wrinkled, and is supple.

2. Weighted silks feel stiff and harsh, have more bulk or "body" than pure dye silks, and wrinkle easily.
3. Synthetics are found in so many combinations and are given such a variety of finishes that no generalizations can be made.
4. Wool feels "springy" and warm. If mixed with silk, the feel is not affected; but if mixed with cotton, the material becomes lifeless and stiff.
5. Linen feels cold, tough, leathery.
6. Cotton made to look like linen lacks the cool feel and is not tough.

Rubbing

1. Pure dye silk may be rubbed without showing marked effect except in certain weaves, such as satin and marquisette.
2. Weighted silk separates as it is rubbed, and one can see spaces between threads very easily.
3. No generalizations on fabrics of synthetic yarns can be made.
4. Wool, when rubbed, may show a roughening of the surface, indicating the possibility that reworked fibers have been added. In other cases in which rabbit hair, ostrich feathers, or cellophane has been added, rubbing will bring the short fiber out, leaving the fabric smooth. Most wool fabrics are unaffected by rubbing.
5. Linens that are heavily filled with starch lose this when rubbed and become sleazy. Starch may even remain on the hands.
6. Cottons that are heavily filled with starch lose this when rubbed and become sleazy. Starch may even remain on the hands.

Breaking

1. Silk. Separate fibers are straight, fine, lustrous; pulls apart with great difficulty.
2. Weighted silk. Similar to silk.
3. Synthetics. Difficult to make generalizations about.
4. Wool. Fibers are wavy, slightly rough, and pull apart quite easily unless they are of a very long combed yarn.
5. Linen. More strength is required to break it than to break wool; ends are usually long and pointed.
6. Cotton. Ends are brushlike, and individual fibers are short.

Burning

1. Pure dye silk. Quickly bubbles, and has dark ash of crisp balls or beads; smells like hair.
2. Weighted silk. Burns slowly, with difficulty; residue is the shape of the piece of material.
3. Synthetics.
A. Rayon

- a. Viscose. Burns quickly, no ash, blue flame.
 - b. Cuprammonium. Burns quickly, with small, yellow flame; is like cotton.
 - c. Cellulose acetate. Smells like syrup, strings down, drops in small balls; fabric melts or fuses.
- B. Nylon. Melts; does not burn.
4. Wool. Burns slowly, smells like hair, grayish ash along edge, crumples easily.
 5. Linen. Burns more slowly than cotton, and the form of the cloth can be seen through the flame.
 6. Cotton. Flashes up; fumes smell like paper.

Ready-to-wear clothing. In ready-made clothing it is not always possible to obtain a piece of the fabric to test, and as more and more of our garments are purchased ready-made, problems of wise selection become increasingly difficult to solve.

The shopper is not always able to tell if a garment has the qualities that assure service. She may be unable to tell which of two knit dresses will stand heavy wear without being excessively stretched, although she may know that stretching and pulling are defects of which she should beware.

Fabrics made of a new fiber or of a new combination of fibers may be placed on the ready-to-wear market without being labeled. Whether the new fabric will be durable or not, whether it will clean easily and be generally desirable, cannot be predicted by the shopper by reference to the fabrics she knows that are most like it in "feel" and appearance. To be able to judge wisely, the shopper must have specific information and experience concerning the material at hand.

Personal experience is valuable to the shopper in knowing which stores are reliable and will stand back of their merchandise. Personal experience is also valuable when it comes to buying well-known and standardized goods. Having bought hosiery of a widely advertised brand that fitted and wore well, the shopper will wish to repeat this purchase when she is again in need of hose. Here experience becomes a valuable guide. If, however, this same shopper attempts to purchase socks for her brother and has never purchased men's or boys' hosiery she will find that the experience of buying for herself is of little help in this instance.

SUGGESTIONS TO THE CLASS

1. From samples of fabrics representative of each of the common textile fibers, draw out yarns three or four inches long. From these yarns draw out

individual fibers. Compare them as to fineness and length. Examine the fibers under the low-power adjustment of the compound microscope. What are the characteristics by which each fiber can be identified?

2. Wash several pieces of fabric representative of each of the common textile fibers in warm soapsuds, rinse them well, and press them while they are wet. Compare each with a piece of the same material that has not been washed and see if it contained sizing. Has the appearance of the material been altered?

3. Make a collection of fabrics of various fibers. Mount these, giving the name of the material, price per yard, and its width, weave, and uses.

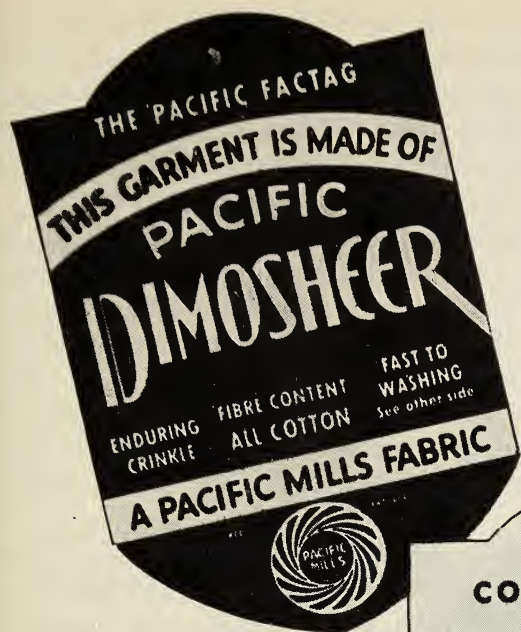
4. Collect labels that are found on materials, giving information as to fiber content, fabric construction, and finishing process used.

5. Collect samples of white fabric representative of each of the common textile fibers. Dye them all in the same dye bath, using some well-known commercial dye intended for animal and vegetable fibers. Compare the color produced in each material. Why have the results not been uniform?

2. How may the buying guides furnished by the producer and the merchant be evaluated?

Information from the store. If the shopper cannot draw on her personal experience with a full sense of security in her decisions, she naturally turns to those who are handling the articles and seeks their judgment. If you stand by a yard-goods counter for a few minutes and listen to the questions asked by shoppers, you will realize how many decisions are made on the basis of information furnished by the store. "Will this shrink? . . . Will this fade? . . . Will this wear well? . . . Is this pure wool?" These and many like questions afford the main avenue by which the store's guidance is given to the shopper. Salespeople, sometimes well informed and sometimes not, respond to such inquiries frankly, giving facts or veiled statements, depending on the code of the store.

Advertising. In addition to the guidance given directly in response to inquiries, every store does much in directing the shopper's buying habits by advertising. Window displays, newspaper advertisements, and radio announcements are used as the means of awakening interest in a given article, or in a given line of articles. An advertisement, however, rarely serves as a guide to satisfactory purchases. As a general rule, too little in the advertisement deals with the characteristics of the article



This is a label used on some cotton fabric which indicates the degree of its colorfastness.

itself. Too much is concerned with presenting the article in such a way as to associate it in the minds of the readers with a desired or pleasurable event. Bath towels are advertised, not on the basis of yarn count, absorptive tests, and breaking strength test, but by a romantic beach scene in which an ardent suitor declares to the maid of his choice that he knew a towel like that could only be found guarding beauty like hers. Dentifrice, soaps, blankets, hose, all are advertised more often in rela-

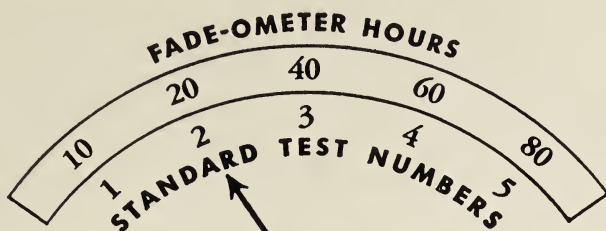
tion to their somewhat remote bearing on a budding romance than they are on their known and proved qualities. A shopper would be unwise to decide on a purchase because of its "romance value" if what she really wants is a durable towel or a mild soap! In other words, generally speaking, advertising at the present time needs much "debunking" before its claims can be taken as guides to wise shopping.

Brand names. Brand names may prove helpful in identifying the producers of certain garments or articles; and in some cases, but not all, they provide an assurance that a certain standard is being supplied. Brand names do not afford information that would enable you to choose between two brands made by the same company on any basis except price, nor do they afford a sound basis for the comparison of brands of various companies. They serve to a certain extent as a means of identification, helping you to buy again an article that has proved satisfactory.

Informative labeling. One of the most helpful guides that a store may give the shopper is informative labeling on all standard fabrics and other similar articles. On fabrics the labels should give the shopper information as to the following: fiber content, yarn count, width, breaking strength, colorfastness, whether or not fully preshrunk, and if not, the amount of shrinkage one might expect. Other information given should include proper care recommended for the fabric and the name of the manufacturer. On ready-to-wear garments the labels should give this information for the fabric used and should offer, in addition, a statement that the article was made under decent working conditions and that the manufacturer conformed to the minimum wage law. Unfortunately, informative labeling is not common enough as yet, nor do those labels that are in use give sufficient information to make them of great help to the shopper. Much information concerning the qualities of merchandise could now be obtained from the manufacturer if the retailer believed that consumers wanted it and could make use of it. The continued request for informative labels will eventually result in their use on merchandise that is of standard quality or better.

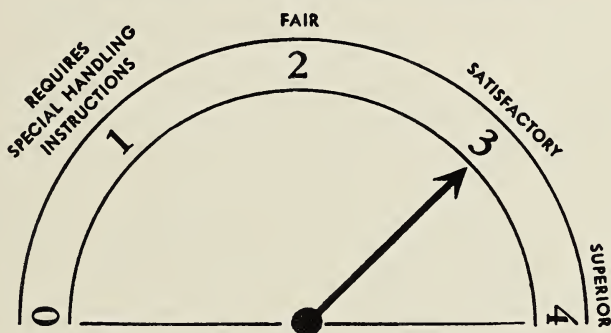
Testing laboratories. For a long time shoppers have trusted certain retailers completely and, because of the reputation of these retailers for honesty, have been willing to accept their recommendations in all those cases in which the shopper lacked experience and information. By maintaining such a reputation for honesty, a store contributes to the standards of the community and gives satisfaction to those who purchase its merchandise. Many large retail as well as wholesale establish-

FASTNESS TO LIGHT



The light fastness requirements will obviously vary greatly according to use. For example, drapery fastness requirements may run from 40 to 80 hours (tests 3 to 5), whereas for dress goods 10 to 20 hours (tests 1 or 2) may be entirely satisfactory.

FASTNESS TO WASHING



STANDARD TESTS

TEST

- 1 105°F; 0.5% soap, no alkali; for 30 min.
- 2 120°F; 0.5% soap, no alkali; for 30 min.
- 3 160°F; 0.5% soap, 0.2% alkali; for 45 min.
- 4 180°F; 0.5% soap, 0.2% alkali; 0.01% available chlorine; for 45 min.

ALL TESTS CARRIED OUT IN STANDARD LAUNDEROMETER

Standard tests measure the degree of permanence of colorfastness to light and to washing.

ments now maintain their own testing laboratories. Here the qualities of merchandise may be compared before the merchant places it in stock, and tests may be made on goods that have been unsatisfactory in the hands of purchasers. There are also testing laboratories where reliable

information on the qualities of goods may be obtained. Such laboratories are helping to speed the time when it will be possible to eliminate much of the guesswork in buying.

Satisfactory adjustments. Readiness on the part of the merchant to make satisfactory adjustments in cases where the merchandise was not as represented remains one of the best aids that the retailer can give to the shopper. Such readiness promises the development of adequate informative labeling backed by the reliability and business standing of the store.

SUGGESTIONS TO THE CLASS

1. Bring to class a number of materials, and demonstrate the extent to which the quality of these materials may be judged by appearance and "feel." Discuss the reliability of inspection in judging the quality of fabrics.

2. Count the number of yarns warpwise and fillingwise in a piece of bleached muslin, a cotton print, and a piece of novelty suiting. Compare the balance of yarns in each fabric. If a "pick" lens is not available for use, a satisfactory device may be constructed by cutting a half-inch square from construction paper, placing this over the fabric, and using any strong magnifying glass. Of what importance to the buyer is the proper balance in count of yarns?

3. Give instances in which the reliable merchant and the well-informed salesperson have given valuable assistance to the purchaser.

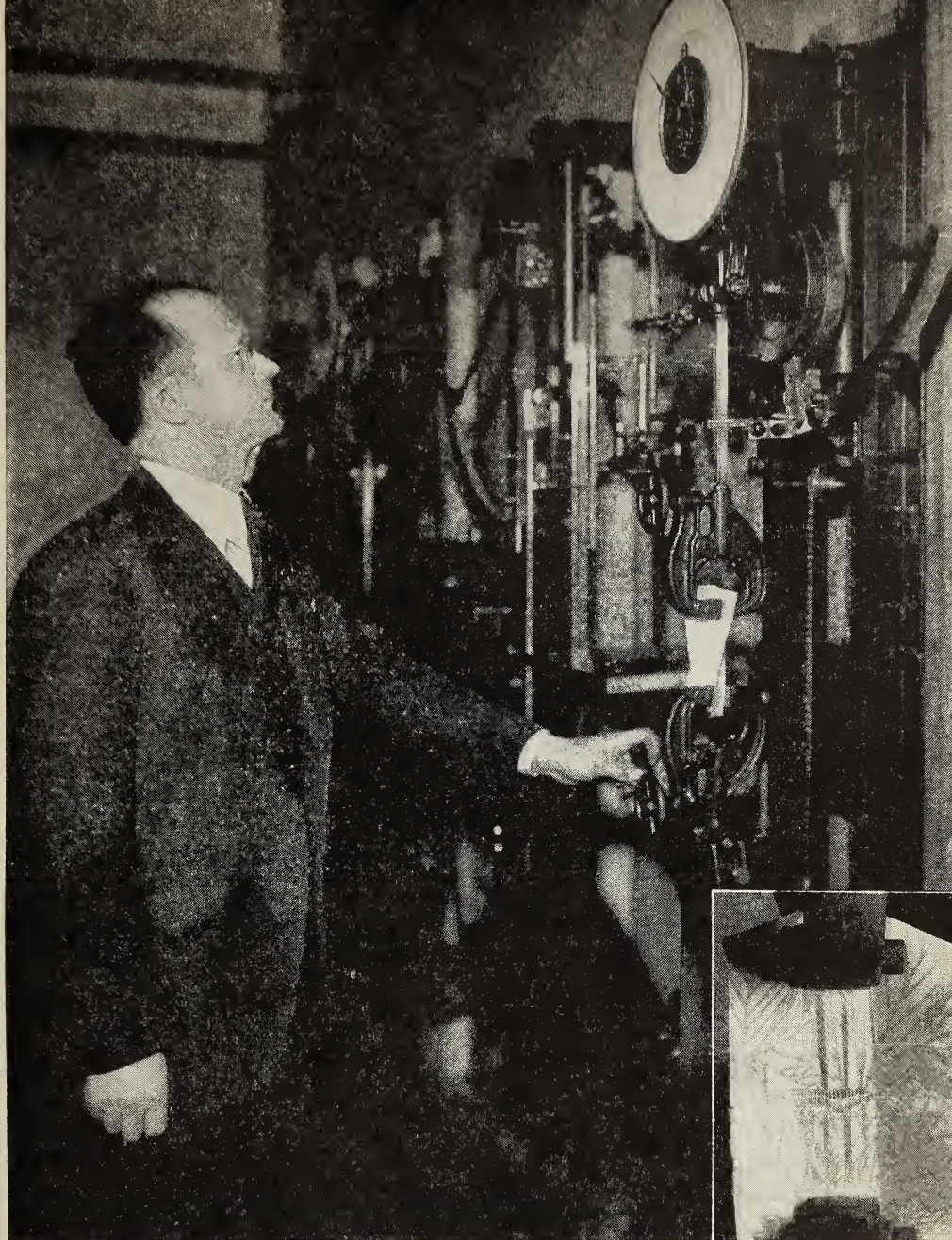
4. Prepare a poster of informative and noninformative labels that have been found on fabrics.

5. Consumer grades have been set up for a number of commodities sold in our retail establishments. What goods are sold according to grades? Can you name any articles of clothing that are sold according to grade?

6. On a number of pieces of material made from the common textile fibers, mark off with indelible ink a square 4 inches each way, wash the fabrics in warm water and soap, rinse well, press, and measure again. Have the fabrics shrunk warpwise? Fillingwise? Upon this basis determine the percentage of shrinkage both ways.

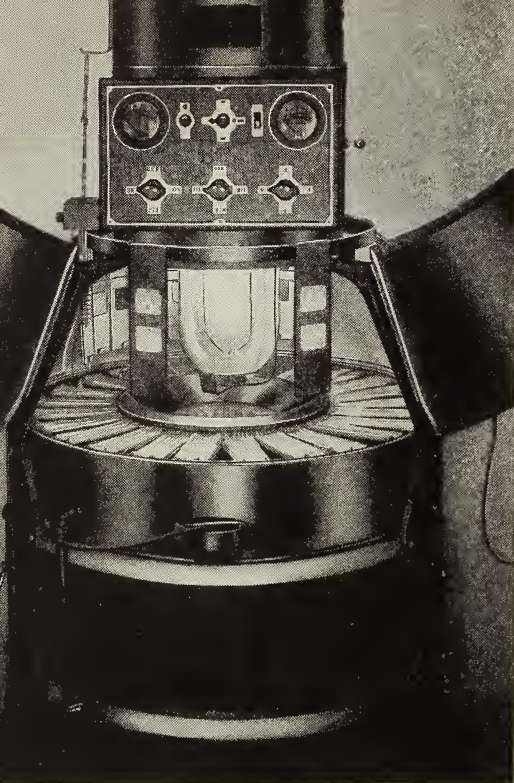
3. What assistance does the government offer to the consumer in the selection of clothing and textiles?

The government as a buyer. Perhaps the first assistance that was given the individual shopper by the government was indirect. This came as a by-product of the necessity for the use of certain specifications



Industrial Standardization, National Bureau of Standards

This machine tests the tensile strength or breaking strength of a fabric. The inset is an enlargement of a piece of seamed cloth clamped in the jaws, showing the strain of the test.



Industrial Standardization, National Bureau of Standards

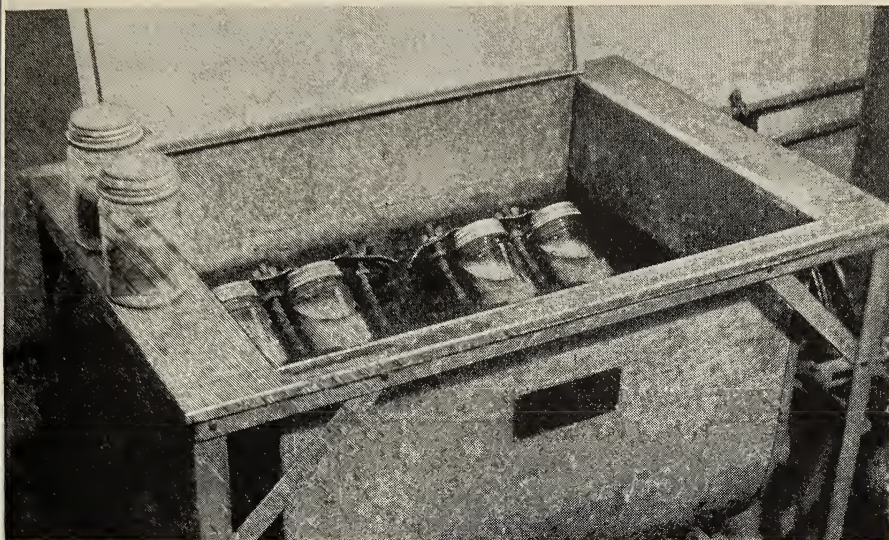
Colorfastness to light is tested in the Fade-ometer. Note the samples of printed fabrics arranged in the small windows about the light. The radiating wicks below are kept moist to prevent the air from becoming too dry during the test.

to guide the government in its own shopping. The government is one of the large buyers of a great variety of items in the field of textiles and clothing.

Because the sums of money involved are large, it has long been a theory that contracts should be let by closed bid, on the basis of a definite statement of the standards to be met. Agencies within the government, such as the Bureau of Standards and the Bureau of Home Economics, have made tests that contributed to slowly evolved statements as to what it was the government desired in the articles to be bought. These statements became the standards to be met, and included specifications—that is, written descriptions of the qualities to be met—on the fiber or fibers to be used for a fabric, the given proportions, the width of the fabric and its weight per yard, the yarn count of both warp and filling yarns, the breaking strength that the fabric

must have to be acceptable, the shrinkage permitted, and colorfastness that the fabric must have. These specifications were supplied to persons desiring the opportunity to sell fabrics and other items to the government, and the bids were agreements to supply, at a stated price, articles meeting these specifications. Thus, in its buying, the government was protected against fraud, adulteration, and misrepresentation by the specific demands made of those who would sell fabrics to it.

Federal specifications. Can you see how the use of such specifications as those that follow, for crash towels, might do much to secure a uniform, standard product for the use of the various government agencies? Would your mother as a purchaser welcome similar specifications for various household fabrics?



Industrial Standardization, National Bureau of Standards

Colorfastness to laundering is tested in the Launder-ometer. Samples of the colored fabrics are placed in jars of soapy water. After the jars are clamped in place, they are agitated in a water bath maintained at a known temperature. The samples are then rinsed and dried and compared with samples of the original material.

FEDERAL SPECIFICATIONS FOR CRASH TOWELS

TYPES OR GRADES

1. *Types.* The material covered by this specification shall be furnished in the following types, as specified:

Type A. Crash Toweling.

Type B. Crash Towels.

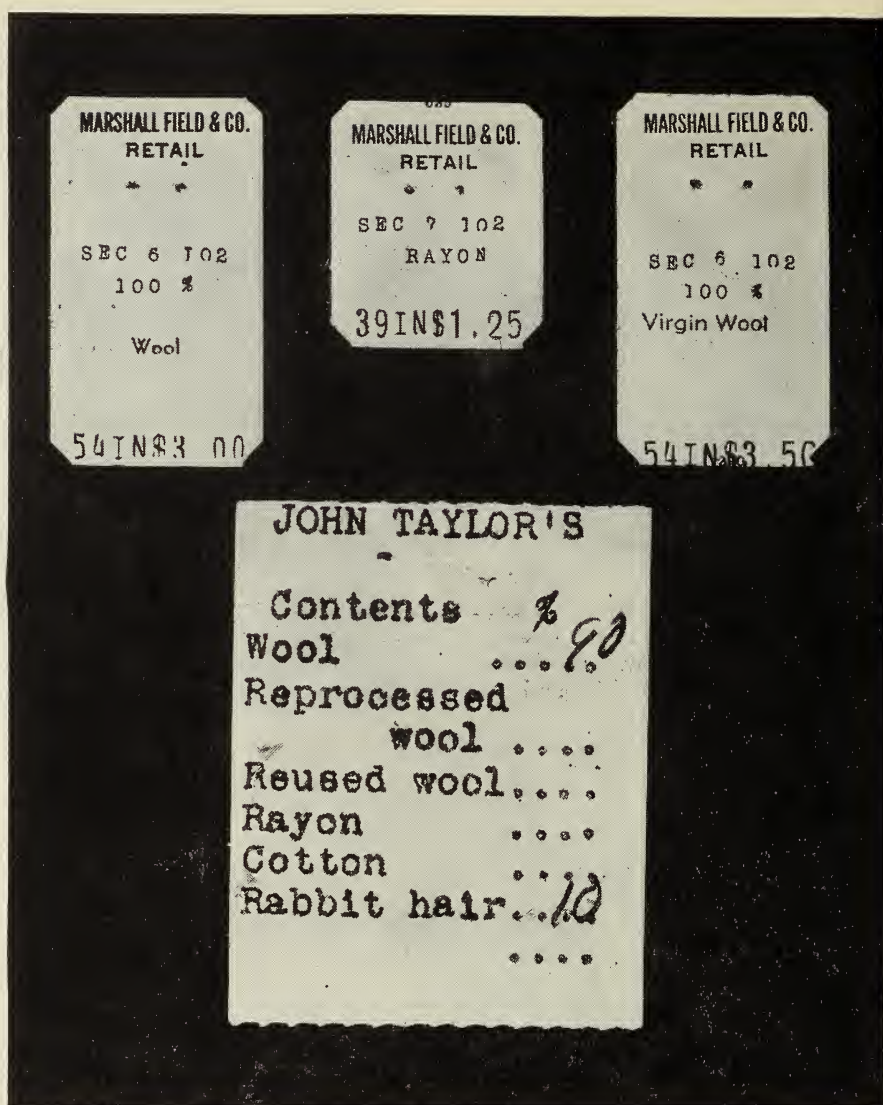
2. *Grade.* The grade shall be that known commercially as "firsts."

MATERIAL AND WORKMANSHIP

The material shall be made of cotton warp and linen filling. It shall be free from avoidable imperfections of manufacture and from defects or blemishes affecting the appearance or serviceability.

GENERAL REQUIREMENTS

1. *Finish.* The material shall be scoured, but unbleached and undyed, except that colored lines one-fourth inch wide may be woven in about one-half inch from each selvage.
2. *Weave.* The material shall be plain woven.
3. *Width.* The material shall be 17 inches wide. A tolerance of plus or minus one-fourth inch will be permitted.



The fiber content of fabrics sold by the yard is now accurately stated.

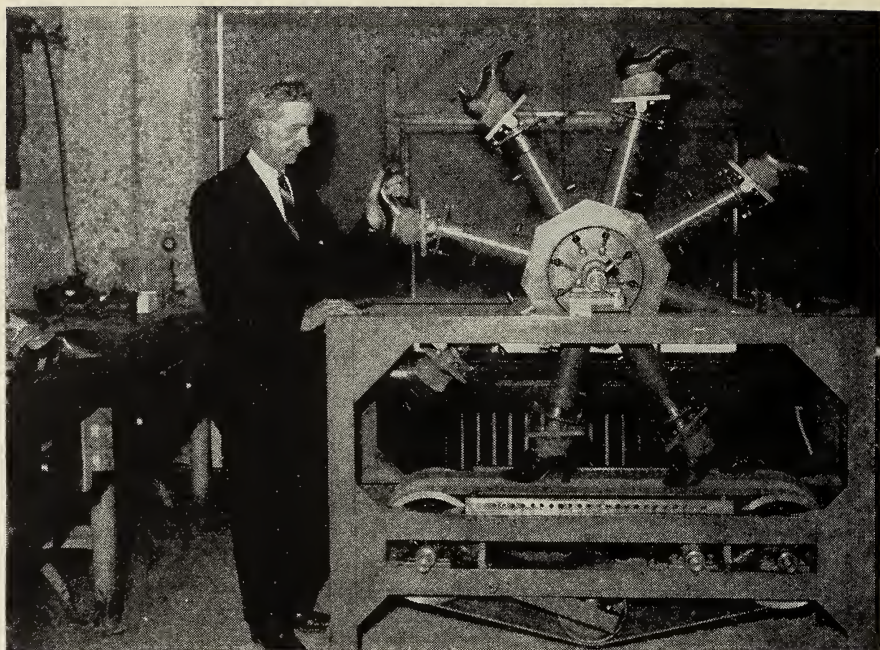
4. *Weight.* The weight per square yard shall be 6 oz. A minus tolerance of 3 per cent and any plus tolerance will be permitted.
5. *Thread Count.* The threads per inch shall be 28 in the warp and 22 in the filling. A minus tolerance of 2 threads in the warp and one thread in the filling and any plus tolerance will be permitted.
6. *Breaking Strength.* The minimum breaking strength (grab method) shall be 45 pounds in the warp and 35 pounds in the filling.

Even though the manufacturers have not put on the market many fabrics labeled as meeting government specifications, the fact that standards had been established became known and people began to try to buy "army serge" or "army blankets." Unfortunately in the case of blankets there was a tendency to accept the khaki color as proof that the government specifications had been met. But by bitter experience many people learned that appearance was not all.

Buying by specification. Large concerns running hotels, railway dining cars, and the like observed the advantages of the government's method of buying as a means of safeguarding the relatively large investments in towels, sheets, table linen, blankets, and other things that their businesses required. They began to imitate its procedure, doing their buying also by specification. As a result, a shopper wishing to buy four sheets can buy them on the basis of specifications just as well as can the hotel man buying 10,000 sheets. Although only relatively few fabrics are now being sold on this basis, we can expect that for standard fabrics, the demand for which arises elsewhere than in fashion appeal, retailing on a quality basis as expressed in specifications may soon become commonplace.

Labeling. For years attempts have been made to pass a law requiring the labeling of fabrics and products made from them. It was not until recently that this effort to help consumers became a reality. The Wool Products Labeling Act, effective July 14, 1941, is a federal law requiring that manufacturers label all fabrics made wholly or in part of wool and that they state the amount of each fiber used. If the wool fiber is new, reprocessed, or reused, the label must so state. If cotton, rabbit hair, or other fiber is present, the kind and amount must appear on the label.

Although wool fabrics are the only ones concerning which we have a law regarding the statement of fiber content, there are now fair trade practice rules which require that a statement made of fiber content must be a truthful statement. Labeling that may be false is much worse than no labeling at all. In 1937 the Federal Trade Commission issued a rule requiring that a fabric containing rayon must be labeled giving the kinds of fibers present and the percentage of each. In 1938 the same commission issued a rule that prohibits the manufacturer of silk fabrics to describe his product as "Pure Silk," "All Silk," or "Pure Dye Silk" that contains any other fiber than silk. It also requires that weighted silks must be labeled, giving the percentage of weighting used. These fair-trade practice rules are intended to prevent unfair competition.

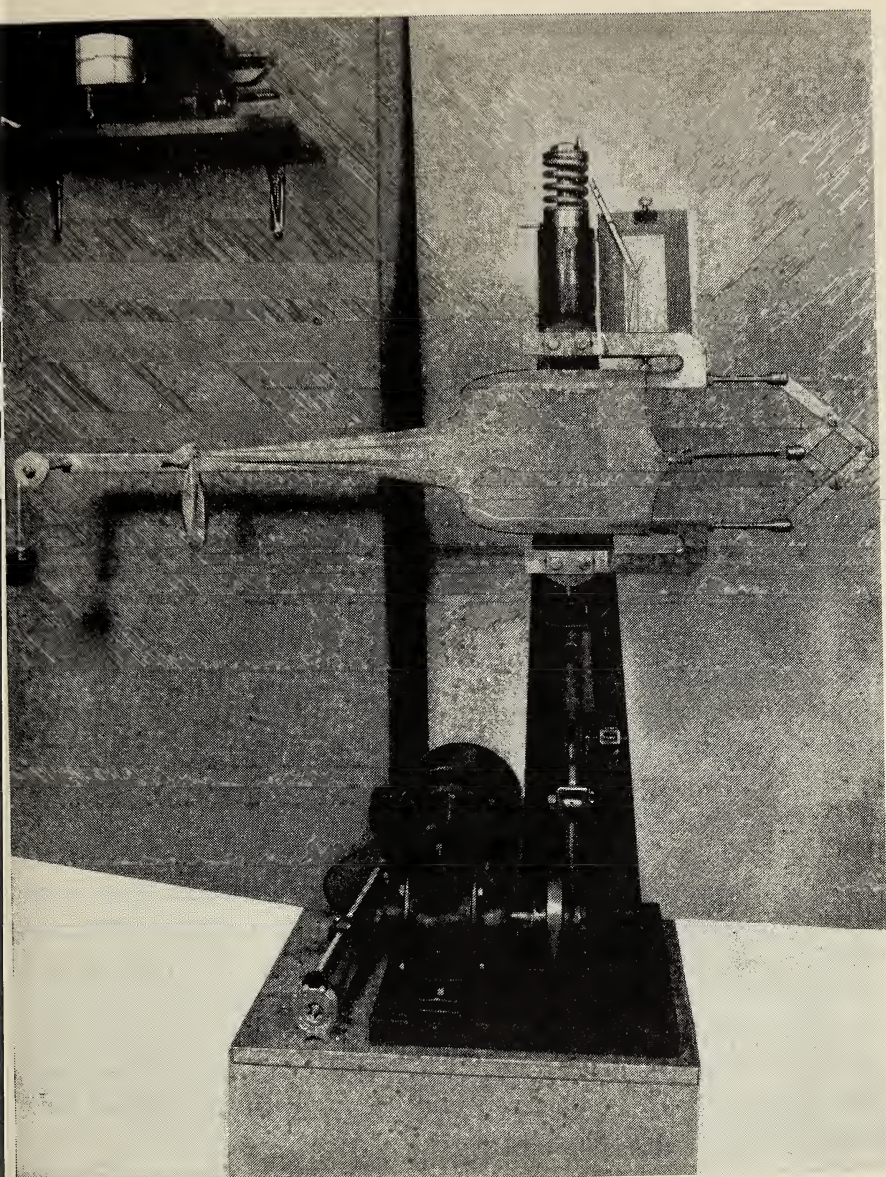


Industrial Standardization, National Bureau of Standards

This is a machine built by the National Bureau of Standards to simulate actual conditions of wear on shoes. Attention is given to the durability of various parts of the shoes, as well as to their ability to hold their shape and remain in wearable condition.

among manufacturers. They also help the consumer to choose fabrics wisely. However, it would seem that manufacturers and consumers alike might be served by a federal law requiring that if statements are made on labels and in advertising, they must be truthful and not misleading.

Government aids for the buyer. So far, the assistance given by the government to the consumer of textiles has been for the most part indirect and incomplete. It is indeed true that there is still much to be done. It is also true that the government has established certain standards for industry that are valuable in protecting the health of the consumer. State and federal laws set forth the conditions under which the work in mills and factories shall be done. To the extent that sweatshops have been controlled, the danger of spreading tuberculosis and other dread diseases has been lessened and the possibility of the sanitary production of various articles has been greatly increased. The extension of the government's activities in the interests of the shopper can be brought about only by having a citizenry concerned in these matters.



Industrial Standardization

A machine used by the National Bureau of Standards to reproduce actual conditions of wear for the testing of the durability of hose.

A number of publications issued by the Bureau of Home Economics are appearing which set forth quality guides for the selection of such articles as coats, dresses, and household fabrics. These are not as definite in their information as the specifications so greatly desired, but

they do offer valuable information to the prospective buyer, and may point toward the coming of exact specifications.

SUGGESTIONS TO THE CLASS

1. Obtain a *Federal Standard Stock Catalogue* (Section IV, Part 1, Index), Supt. of Documents, Washington, D. C. Price 10c. Check through the alphabetical list of federal specifications, noting the large number of articles for which specifications have been set up.

2. Study the section of the *Federal Standard Stock Catalogue* (Section IV, Part 5) that deals with stitches, seams, and stitching, noting the care with which the government has set up requirements for the making of garments.

3. Bring to class labels found on fabrics or on ready-made garments that state the percentage of wool, rayon, or silk present. Has reprocessed or re-worked wool been used? Is the kind of rayon specified? Do you find any weighted silk used?

4. How could the buyer's task be simplified?

Understanding the marketing system. The first step in the simplification of the buyer's task might be the development of an understanding of the marketing system that exists in our country and of the way in which it operates. Lacking this, one is much like Alice in Wonderland—wide-eyed and bewildered. The study of economics in the high school and a continued interest in the subject after high school days is essential to the development of people interested in consumer problems. Whether you like it or not, the threads of your habits of enjoyment and your habits of securing satisfaction in what you buy are all interwoven into what we call our economic system. An understanding of that system, of its markets and their operation, contributes to greater ease and satisfaction in obtaining what you want, and to a sane relation of your desires to the good of your country.

Adequate information on fabrics. The next step in the simplification of the buyer's task could well be the development of adequate information on desirable qualities of fabrics and on articles made from fabrics. These facts must then be made available to the consumer. You are making a beginning in your study in this course and doubtless in other courses. But your high school courses will afford merely a beginning. You need to keep alive a real curiosity as to what goods meet your needs best, and why. You need to keep continually informed concerning new

synthetic fabrics, new finishes, and new combinations, and you need to check the qualities these fabrics possess against those you have found desirable, so that your choices may be wise. Thus you will be informed concerning qualities. Buying on a quality basis is indeed important in simplifying the buyer's task.

Federal requirement that goods be labeled. The third step might be the requirement by the government that all staple fabrics be labeled truthfully and without misleading statements. If the fabric analysis or statement of grade were to appear on each bolt of fabric and on all ready-to-wear garments, a basis for judging quality would be provided. This, coupled with truthfulness in advertising, would make buying a relatively simple matter for the person who kept well informed.

Development of standards. The continued development of standards for various goods and the intelligent limiting of the variety of fabrics offered, particularly those that are highly seasonal in character, would be further desirable steps in simplifying the buyer's problem.

Research in clothing and textiles may lead to the improvement of present standards and to the establishment of new ones. To a greater extent, impartial testing bureaus are being depended upon to offer checks as to standards reached for fabrics.

It may take time to transform the task of the buyer from one of guesswork to one of precision, but the way is beginning to open and the outlook for simplification is fair.

Government restrictions. In times of national emergency the government places restrictions both on the production of clothing and on its use. During World War II there were general limitation orders imposed by the government on production of ready-made garments for men, women, and children. These limitations were intended to stabilize styles and thus to reduce the waste that results from changes in fashion. Savings in material and in effort necessary to make clothing were also brought about by the limitations set up. These governed the widths and lengths of garments, widths of collars, and depths of hems and prevented the use of patch pockets and cuffs on men's trousers.

Such restrictions on what was produced really simplified the buyer's task. There was less effort wasted in always looking for the latest fashion. After all, style was more or less stabilized!

Although our country did not see fit to limit the use of clothing by means of rationing, certain European countries depended upon this means to direct man power into channels more vital to winning the war.

It does not seem part of the American way of life to have the government interfere with the change of fashion or limit us as to the amount of clothing we may buy. Most people like better to believe that they may have full freedom of choice and are glad that the emergency is past which called for such restrictions.

SUGGESTIONS TO THE CLASS

1. List the various steps through which cotton passes before it reaches the purchaser as a piece of percale.
2. Similarly list the agencies that are concerned with the production of rayon crepe dresses. How is the price of an article influenced by the number of agencies through which it passes?
3. List the qualities you desire in a cotton play suit; a party handkerchief; a wool school dress; a silk afternoon dress. How will an understanding of the qualities desired affect your purchasing habits?
4. Bring to class some examples of good advertisements that serve to inform the prospective buyer.
5. Bring to class labels from goods or advertisements which specify that articles have been made to conform to government standards.
6. Debate the following subject: Resolved that standardization of yard goods is essential to the improvement of buying.

SUMMARY

The shopper seeking guides turns first to general knowledge gained by personal experience and study. For certain standard fabrics she may have partially effective knowledge from this source. Her guides fail when new fibers or fabrics are introduced, however, and when style values become important, her experience may be of little value. She turns next to the guides offered by the producer and the retailer, and finds that it is the exception rather than the rule when reliable facts about the article appear in the advertisement. Brand names may be helpful in repeating a previous purchase, but they afford no basis of comparison between articles. Informative labeling, giving actual facts about the articles, and the honor of the dealer in assuming fair responsibility for his recommendations seem the best help which the retail store has to offer the shopper.

The assistance of the government to the shopper is found as yet to be largely indirect, arising in the establishment of standards based on specifications undertaken to guide the buying which the government itself must do. These specifications are being found to some extent on staple fabrics in the market today. The most direct aid given by the

government is through the federal law that requires that every wool product be labeled. The labeling of rayon fabrics, although not a law, has been made mandatory by the Federal Trade Commission. The protection the government affords the worker and the inspection of conditions of labor, alike, contribute toward the production of fabrics and garments under sanitary conditions, a matter of health protection for the consumer.

Looking ahead, it seems that the buyer's task could be simplified if she were informed about the market and its operation, if she knew what qualities really affected the durability and satisfaction to be expected from a fabric, and if she could identify goods having such qualities by full and truthful informative labeling. Perhaps some day advertising may be made to relate to the article at hand, dealing truthfully with its characteristics. Then the buyer would find her task more simple than it is today.

6

Planning Clothing Expenditures

Knowing what it costs to make a good appearance is important in planning one's clothing. The girl who wishes to make the most of herself must be able to choose beautiful and appropriate clothing. She must know that time and energy as well as money will be spent if she is to look her best. She must know how the amount of money available for clothing will influence whether she buys her garments ready-made or makes them at home. She must learn how making a plan for the use of a clothing allowance may make it possible for her to be better dressed than if she buys without a plan. She needs to recognize that what she spends for clothing may be closely related to the happiness of her family. She must also realize that skill in the making of clothing is an important way of making her allowance go farther.

1. What determines the money to be spent for clothing?

Have you ever watched a group of girls pour from an office building at the end of a working day? Many are overdressed. The fur coats, the fashionable hats, and the faddish shoes require the spending of an amount of money that is a far larger proportion of their earnings than is reasonable. Too often the total amount to be spent for clothing for a season or for the year has never been decided upon in advance. Purchases are made upon the impulse of the moment, a practice that is sure to lead to spending that is far more than one's earnings will allow. The flattery and urging of a salesperson, or the appeal of the "latest color,"

leads girls to buy clothing that is not really needed. In fact, the failure to plan for other needs besides clothing may even mean that the girl lacks adequate food.

However, if one wishes to be wise in her spending, as we all should, there are certain things that must be taken into account in planning the amount that may reasonably be spent for clothing.

Basic clothing wants. There are certain clothing wants essential to decent living, as we understand this term, that must be satisfied. In part, these wants are concerned with our physical comfort. We want to be warm, but not too warm, secure from chill winds and rain, and protected from the burning rays of the sun. We want the comfort of clean clothing and we want the ease provided by clothing that permits freedom of movement. Then there are wants that arise from our social nature. We want our clothing to give us a feeling of oneness with others about us. We want our clothing to reflect our good taste, to add to our personal appearance, and to announce that we know what is going on in the modern world. Perhaps you can add to the list of what you would regard as basic clothing wants. Satisfying these wants calls for the expenditure of money.

The importance of certain of these demands varies so greatly among people that it is difficult to give a general statement as to what makes for wise spending for clothing.

Size of income affects buying. The size of the income—that is, the amount of money that may be spent for all the various wants of the family—affects directly the amount of money that may be spent for clothing either by the family as a whole or by individual family members. If the income is small, the demands of the family for food and shelter may leave little to be spent for clothing. This is clearly shown in the table which appears on page 160. Here is given the percentage of families whose annual incomes, before the payment of taxes, fall into the various levels. The “spending unit” means all persons living in the same dwelling and belonging to the same family who pooled incomes to meet major expenses. Many more than half the families had incomes for the year of less than \$3000; 70 per cent in 1945, and 65 per cent in 1946. Ten per cent of all families in the United States had an income of \$5000 or more in 1946.

Another way to gain a picture of what may be spent for our various wants is to learn what the “middle income” is for various occupations. The incomes of “middle families” living in the United States, engaged in various occupations in 1946 are shown in the table on page 160. The

DISTRIBUTION OF SPENDING UNITS BY SIZE OF INCOME

ANNUAL MONEY INCOME BEFORE TAXES	SPENDING UNITS	
	1946	1945
Under \$1000.....	17	20
\$1000-1999.....	23	27
2000-2999.....	25	23
3000-3999.....	17	15
4000-4999.....	8	7
5000-7499.....	6	5
7500 and over.....	4	3
	100%	100%

Data for 1945 and 1946 from the Federal Reserve Bul., July 1947, p. 791, Board of Governors of the Federal Reserve System, Wash., D. C.

"middle family" means that half of the families who belong to the group have less than the amount shown and half have more. Farmers' incomes appear smaller in proportion because much of their food and often their fuel is supplied by the farm in addition to reported income.

INCOMES OF "MIDDLE FAMILIES" IN THE UNITED STATES

OCCUPATION GROUP	MIDDLE INCOME FOR THE YEAR
Farmers.....	\$1,300
Skilled workers.....	2,800
Semiskilled and unskilled workers.....	2,300
Professional workers.....	4,000

Data for 1946 adapted from 33rd Annual Report of Board of Governors of Federal Reserve System, Supt. of Documents, Washington, D. C., 1947.

The "middle income" for families living in the United States has become much larger than in the years preceding the last war. Note the figures given in the table on page 161. In ten years' time this "middle income" has more than doubled. Can we expect incomes to continue to increase in the next few years? If they do, will we enjoy a higher standard of living?

Although the average income of families living in the United States has shown a large increase in the past ten years, money will not buy as much as it did in 1935-36. Price indexes for large cities in the United States calculated for May 15, 1947, show that moderate-income families paid 83.8 per cent more for clothing than they did in the month before the war in Europe (1939). A study of the table on page 161 shows how the national income has increased for this country, and with it the number of dollars spent for clothing. It is interesting to see, however, that the percentage of this income spent for clothing has varied so little

MIDDLE INCOMES OF FAMILIES IN THE UNITED STATES

YEAR	MIDDLE INCOME
1935-36.....	\$1,060
1945.....	2,020
1946.....	2,300

from year to year. The lowest percentage spent for clothing was in 1944, one of the years of the war when it was realized that all effort must be turned to winning the war rather than buying fashionable clothes. The highest percentage of 10.1 was spent in 1941, just before we entered World War II.

NATIONAL INCOME AND CLOTHING EXPENDITURES

YEAR	NATIONAL INCOME	CLOTHING EXPENDITURES	
		Dollars	Percentage of income
1935-36.....	56.3 billion	\$ 5,010 millions	8.9%
1939.....	70.8	7,009	9.9
1940.....	77.6	7,216	9.3
1941.....	86.9	8,776	10.1
1942.....	105.4	10,223	9.7
1943.....	149.4	14,790	9.9
1944.....	160.7	13,016	8.1
1945.....	161.0	14,973	9.3
1946.....	164.0	16,072	9.8

Data for the years 1935-36 to 1946 adapted from "Sales Outlooks for Clothing in the new America," American Wool Council, 1450 Broadway, N. Y.

The high school girl who belongs to a family of four on an income of \$2,300 a year will find that her share of the family's expenditures for clothing will probably be not more than \$65 for the year. On the average, the whole family will not spend more than 10 per cent of its income for clothing. She must plan so as to use only her share of this 10 per cent if happy relationships are to exist among all members of the family.

The girl who is on her own does not usually hold her expenditures for clothing to as small a proportion of her earnings as does a family. She justifies herself by saying that she must dress well to hold her job. Limited studies of the spending pattern of employed girls have shown that their clothing expenditures often constitute from 15 to 25 per cent of their salary. A girl earning \$20 a week and employed 50 weeks in a year might spend \$150 a year for her clothing. What proportion is this of her total earnings?

Number in the family. The number of persons in the family also affects the amount of money available for the clothing needs and wants of the members of the group. A family of four, for example, must spend more for food than a family of two. If the two families have the same income, the individual members of the family of four will have less to spend for clothing than those of the family of two. This is clearly shown in the following table, comparing the spending plan for family incomes of \$225 and \$400 a month.

MONTHLY EXPENDITURES OF A FAMILY OF TWO AND FOUR COMPARED

BUDGET DIVISIONS		TWO IN FAMILY		FOUR IN FAMILY	
		<i>Dollars</i>	<i>Per cent</i>	<i>Dollars</i>	<i>Per cent</i>
\$225	Food.....	63.00	28%	85.50	38%
	Shelter.....	33.75	15	33.75	15
	Clothing.....	22.50	10	22.50	10
	House operations and furnishings...	15.75	7	15.75	7
	Savings and insurance.....	22.50	10	13.50	6
	Health.....	9.00	4	13.50	6
	Advancement.....	6.75	3	11.25	5
	Automobile.....	11.25	5	0	0
	Taxes.....	22.50	10	15.75	7
	Miscellaneous.....	18.00	8	13.50	6
	gifts, dues church personal care				
		\$225.00	100%	\$225.00	100%
\$400	Food.....	72.00	18%	112.00	28%
	Shelter.....	60.00	15	60.00	15
	Clothing.....	40.00	10	40.00	10
	House operations and furnishings...	28.00	7	20.00	5
	Savings and insurance.....	60.00	15	40.00	10
	Health.....	16.00	4	24.00	6
	Advancement.....	16.00	4	16.00	4
	Automobile.....	20.00	5	16.00	4
	Taxes.....	64.00	16	48.00	12
	Miscellaneous.....	24.00	6	24.00	6
	gifts, dues church personal care				
		\$400.00	100%	\$400.00	100%

At a salary of \$225, a family of four may allow each of its members \$5.62 a month for clothing; at a salary of \$400, the allowance for each of its members is \$10 per month. When the family receiving \$225 per month has two members instead of four, the clothing allowance is increased from \$5.62 to \$11.25 per person. A similar difference in the monthly clothing allowance for each family member will also be seen for the family receiving \$400 when it has two members instead of four.

Working girl's budget. The girl who is employed and depends wholly on her own earnings may not follow a plan which seems so sound as does the family. If wages are small, the amount allowed for savings often nears the zero point. A plan which has been followed by a girl who earns \$30 a week is given below. In this instance the girl who is employed in a city found it possible to obtain a room and two meals a day in a girl's hotel for \$13.50 a week. If the girl lives at home she will find that her share of the living costs are a little less than the amount set aside for room and two meals a day as shown in the plan. In that case she will be able to save some each week as well as to allow a little more for incidentals. Gifts, dues, postage, and stationery are among those items that must be taken care of under the heading of incidentals. Below is listed a weekly budget for the girl earning thirty dollars a week.

Room and two meals	\$13.50
Lunches	3.50
Clothing	3.50
Upkeep on clothing .....	.75
Personal care and cosmetics .....	.75
Health .....	.50
Transportation	1.75
Recreation .....	.75
Church .....	.25
Taxes	3.50
Incidentals	1.25
	<hr/>
	\$30.00

Age of family members a factor. Rarely is the money available for clothing equally divided among family members. The age of the family members affects the way in which funds for clothing will be divided. It is possible to assemble a satisfactory wardrobe for a ten-year-old girl for half the cost of that of her sister who is a senior in high school. It has also been found that the wardrobe of the high school girl often costs more than that of her mother or of her married sister, perhaps only two years her senior. Wide differences between the clothing expenditures of these three persons may not be wise.

Differences in annual expenditures for clothing by family members were determined for a group of Chicago families by May L. Cowles.¹

¹ May L. Cowles, "Variations in Demand for Clothing at Different Income Levels—A Study in the Behavior of the Consumer." Unpublished thesis (1929), University of Chicago.

The average annual expenditure for an adult male was used as the unit of expenditure, and the following relationships were found to exist between the clothing expenditures of the family members:

Husband	1.0
Wife .....	.9
Male child, 15 years and over	1.0
Female child, 15 years and over	1.2
Male child, 12 to 15 years .....	.6
Female child, 12 to 15 years .....	.7
Male and female child, 8 to 12 years .....	.5
Male and female child, 4 to 8 years .....	.4
Male and female child, under 4 years .....	.3

This allows a relatively high cost for the high school girl's wardrobe. Records that have been kept of yearly expenditures for clothing for boys and girls of school age show that often, for a boy and a girl of about the same age, actually more cash is spent for a boy's clothing than for a girl's clothing. The reason for this is that in most households all of the boy's clothing is bought ready-made and much of the girl's may be made in the home.

A recent analysis of the clothing expenditures of a large number of families living in small towns in the Middle Atlantic and North Central region show that, on the average, women and girls spend slightly more

COMPARISON OF CLOTHING EXPENDITURES

FAMILY MEMBER	FAMILY OF AN EXECUTIVE	FAMILY OF A WHITE COLLAR WORKER	FAMILY OF A WAGE EARNER
Man	\$194.62	\$ 87.44	\$68.82
Wife	307.08	126.33	81.76
Boy, 13	127.87	97.71	80.02
Girl, 8	129.73	71.58	54.17

Figures taken from "Wartime Budgets for Three Income Levels," Heller Committee for Research in Social Economics, Univ. of Calif., 1945.

than men and boys. Budgets for three income levels planned by the Heller Committee for Research in Social Economics allow more for the wife than for the husband whether the family is that of an executive, a white collar worker, or a wage earner. Figures in the table that follows show that, except in the family of the executive, the child of 13 is allowed more than the child of 8. If the daughter in the family were 15 years old rather than 8 what would be a fair allowance for her clothing for the year?

Effect of environment. Where one lives may have its effect on a family's plans for spending for clothing. For example, a family living in Florida would have little need for fur coats, whereas a family living in northern Canada might find such garments a necessity.

COMPARISON OF CLOTHING EXPENDITURES FOR GIRLS 12-15

FAMILY INCOME	AVERAGE CLOTHING EXPENDITURES	
	New York and Chicago	West Central and Rocky Mountain, 2 large and 4 small cities
\$ 500-\$599	\$ 11.17	\$ 25.87
1000-1499	25.42	34.00
1500-1999	32.79	40.25
2000-2999	52.43	56.09
3000-3999	65.25	70.87
4000-4999	103.12	88.61
5000-7499	128.14	108.55
7500 and over	586.54	....

U. S. Department of Labor Bul. 648, p. 251.

A comparison of the average clothing expenditures of white girls from twelve to fifteen years of age living in New York and Chicago with those of girls living in the West Central and Rocky Mountain area, as shown in the table on this page, raises several questions. What other demands on the family budget of families living in New York and Chicago made necessary such small clothing budgets in the two lowest-income groups? Why does the girl living in New York or Chicago, whose family income is \$4,000 to \$5,000, spend more for her clothing than the girl from the West Central and Rocky Mountain area?

Let us consider another case. A woman living in a city, who holds a position as private secretary to an executive and who enjoys long evenings of leisure in her apartment might have use for more than one dressy housecoat. A young mother would find little use for such a garment. She needs a sturdy warm robe for winter and an easily tubbed housecoat for summer. Do you believe a high school girl should include lounging pajamas and a rayon crepe robe in her wardrobe?

Buying power of money. The buying power of a dollar is greater at some periods than at others. The buying power of the dollar changes somewhat, even from month to month. A marked increase in the price of a number of articles of clothing for both men and women occurred between 1941 and 1947 as reported by the United States Department of Labor in the following table:

DEPARTMENT STORE INVENTORY
PRICE INDEXES DEPARTMENT
GROUPS, COMPARING 1941 AND 1947

ITEM	JANUARY 1941	JANUARY 1947
Piece goods.....	100	196.4
Shoes.....	100	160.6
Ladies' underwear.....	100	158.8
Ladies' outerwear and girls' wear.....	100	164.7
Men's and boys' wear.....	100	178.9

Bureau of Labor Statistics, Washington, D. C., January 1948

An average of many prices gives what is known as an index to price levels. A comparison of the annual averages given in the table that follows shows how the value of the dollar changes. The average of prices between 1935 and 1939 has been given a value of 100. By the time the war was over in August, 1945, the cost of all consumers' goods was 29.3 per cent higher than in the years between 1935 and 1939. Only one year later the percentage increase was 43.7 over the base year. A dollar would buy more in 1939 than it did in 1946. Food shows the greatest increase of any one item over 1935-39 prices. Clothing likewise showed a de-

CONSUMERS' PRICE INDEX

	1935-39	AUGUST 1945	AUGUST 1946
Combined index.....	100	129.3	143.7
Clothing.....	100	146.4	159.7
Food.....	100	140.9	171.2
Fuel, electricity.....	100	111.4	113.7
House furnishings.....	100	146.8	158.1
Rent.....	100	108.3	108.7
Miscellaneous.....	100	129.0	124.5

cided increase, 59.7 per cent greater than the base year. More recent reports for January 1, 1948, place clothing 92.1 per cent higher than in 1935-39. This means that many more dollars must be spent to obtain the same value than in 1939.

When the buying power of money is relatively low and the income of the family is not increased, coats are worn an extra season, repaired shoes take the place of new shoes, and the wardrobe is generally limited. When the buying power of the dollar is high, there is a tendency

to discard clothing before it has rendered full service and to extend the wardrobe through the addition of garments that are not actually needed.

We have periods of inflation, when prices of clothing as well as other goods rise sharply, and periods of deflation, when prices go down. Even before the declaration of war, the price of goods showed a definite increase over those of depression years. Wages and incomes for some people increased also. But as prices of goods increased, many people hastened to buy before prices went still higher. If shoe prices have advanced twice within a six-months' period, you may think it wise to buy an extra pair before there are further increases, even though your present stock is adequate for immediate use. Because there were many people who were doing just this and forcing further price increases, government regulations or "ceilings" were placed on the prices of goods. At the same time, everyone was urged to invest in government bonds. This was intended to lessen the demand for goods and also to loan the government money for carrying on the war. If no steps had been taken to lessen unnecessary spending, more serious inflation would have occurred during the war years.

Now with the return to peace, ceilings have been lifted from the prices of goods. Wages for a number of industries are double what they were in 1940. With this increase in wages, prices still went up until in May, 1947, the cost of living covering all items was 43 per cent higher than it had been in 1939. Even though people have more money to spend it takes more dollars to buy the same kind of a coat or pair of shoes that might have been bought ten years ago. Industry is trying to increase its efficiency so as to insure jobs to many people. This will mean that in general we will enjoy a higher standard of living. If greater efficiency cannot be reached, the country will suffer financial collapse and an inevitable lowering of wages.

If we stop to think of the far-reaching effect of the many thoughtless ways in which we spend money for clothing it should often give us pause. Our understanding of our clothing needs should be so clear and definite that larger buying power of the dollar should not lead us into either unnecessary or extravagant purchases.

Occupation. Occupation may set up special requirements for dress that can affect markedly the family's clothing expenditures. There are any number of occupations of the white-collar class that call for tastefully chosen clothing for the wage earner that must be kept clean, well

pressed, and in good repair. Other family members are expected to maintain a similarly good appearance. The income for such a family may be no more than for the family whose livelihood makes less exacting demands.

DIFFERENCES IN GIRLS' CLOTHING EXPENDITURES

PLACE OF RESIDENCE	ANNUAL EXPENDITURES
Farms:	
North and West	\$30.89
South and East (white operators)	24.80
South and East (white sharecroppers)	16.74
South and East (Negroes)	11.85
Villages:	
North and West	35.96
South and East (white families)	41.82
South and East (Negro families)	15.61
Small cities:	
North Central and West	47.24
Southeast (white families)	37.08
Southeast (Negroes)	21.81

U. S. D. A. Misc. Pub. No. 422 and 428.

The average expenditures for clothing of girls from twelve to fifteen years in all income groups, living on farms and in small cities and villages, for 1935-36 are given in the table on this page. Can you account for the differences in clothing expenditures of the average girl from the various regions on the basis of occupation? What else may cause these differences?

SUGGESTIONS TO THE CLASS

1. Make a list of the clothing that you consider basic for a girl attending high school, taking into account the various seasons. How much would it cost to purchase such clothing in quantity sufficient for one year? It should be remembered that some of the articles of clothing listed will be worn for more than one year.

2. Find the average family expenditure for clothing that corresponds to your own family's income in the table presented on page 165. What is your share of this amount? Plan your annual clothing expenditures on this basis. If the amount which you could spend were increased by one-half, what would you add to the list or what changes in your plan would you make?

3. Mr. and Mrs. Abel have three children, a girl of sixteen, a boy of fourteen, and a girl of twelve. Mr. Abel, a clerk in a retail store, has an income of \$175 per month. Their budget allows 12 per cent to be spent for clothing the entire family. What proportion of this amount should the older girl spend? (Solve by using Cowles' indexes.)

4. Obtain from the U. S. Department of Labor reports on the price index for this year. Compare this with the index number five years ago. Will a coat of the same quality cost you more or less dollars than five years ago?

2. What is a satisfactory plan for clothing expenditures?

Need for a spending plan. Plans for spending help one to live within one's income. From ancient times experience has shown that failure to live within one's income will result in financial loss and personal disaster.

Spending plans are sometimes disliked because they require careful thought if both present and future needs are to be met. Some people would rather gratify the whim of the moment. What a plan really does is not to prohibit expenditures for whims but to make it possible for one to see first one's actual needs and then allow the "extras" to take their rightful place. By providing for real needs first, the number of "emergency purchases" are lessened because we have looked back over last year's purchases and have profited by the experience. In a way planning may be thought of as the addition of brains to money and energy.

The discussion to this point has been general, dealing with any and all plans for spending. All that has been said, however, is true concerning a plan for clothing expenditures. To be effective, of course, the plan must be a wise one.

Expenditures related to income. What characterizes a wise plan for clothing expenditures? The first characteristic is suggested in the preceding discussion. The wise plan provides for clothing expenditures in keeping with the family income, and with its fair division among family members. For example, a daughter in a family of four whose father earns \$200 per month could not include the purchase of a fur coat in a wise plan for clothing expenditures. Again, the wage-earning girl who receives \$25 a week cannot include a hat costing \$10 in a wise plan for clothing expenditures. In both these cases, such purchases would not be in keeping with the income. Relating clothing expenditures to the income means that the load is distributed over the whole year, and even over several years. A wise plan will allow for a certain amount for clothing expenditures each month. It may be necessary to save most of this allowance for several months to purchase a coat or some other relatively costly item. Certainly a wise plan will not pro-

LIBERAL ALLOWANCE FOR THE HIGH SCHOOL GIRL'S CLOTHING

ARTICLE	NUMBER	UNIT COST	YEARS OF SERVICE	COST PER YEAR
<i>Outer Garments</i>				
Winter coat, brown with fur trim	1	\$49.00	2	\$24.50
Camel-hair colored coat	1	25.00	2	12.50
Spring suit, check flannel	1	25.00	2	12.50
Suede jacket	1	16.50	2	8.25
Velveteen jacket	1	10.95	2	5.48
Raincoat	1	10.95	2	5.48
Beret	1	1.95	1	1.95
Dark felt hat	1	7.50	1	7.50
Spring felt hat	1	5.00	1	5.00
White hat	1	4.50	1	4.50
Scarf square	1	1.98	1	1.98
				\$89.64
<i>Dresses</i>				
Dark rayon crepe	1	\$16.50	2	\$ 8.25
Wool plaid	1	12.50	2	6.25
Sheer wool pastel	1	16.50	2	8.25
Spring pastel rayon	1	16.50	2	8.25
Flannel skirts	2	4.98	2	4.98
Rayon blouses	2	3.98	2	3.98
Sweaters	2	4.98	3	3.32
Cotton sports dresses	4	5.95	2	11.90
Winter formal	1	19.75	2	9.88
Cotton formal	1	15.00	2	7.50
				\$72.56
<i>Footwear</i>				
Sport shoes	2	\$ 5.95	1	\$11.90
Street shoes, winter	1	7.50	1	7.50
Street shoes, spring	1	6.50	1	6.50
White shoes	1	4.95	1	4.95
Play shoes	1	4.95	1	4.95
Evening sandals	1	4.50	2	2.25
Bedroom slippers	1	2.98	2	1.49
Rubber boots	1	3.50	2	1.75
Anklelets	10	.35	1	3.50
Stockings	4	1.35	1	5.40
				\$50.19
<i>Sportswear</i>				
Cotton playsuits	2	\$ 2.95	1	\$ 5.90
Slack suit	1	9.50	2	4.75
Swim suit	1	4.00	2	2.00
Swim cap	1	1.00	1	1.00
Gymnasium suit	1	2.75	2	1.38
Gymnasium shoes	1	1.50	2	.75
Gymnasium socks	2	.35	2	.35
Ski suit	1	15.00	2	7.50
				\$23.63
<i>Underwear and lounging</i>				
Quilted robe	1	\$12.50	2	\$ 6.25
Lounging robe	1	7.50	2	3.75
Sleeping pajamas	3	3.00	1	9.00
Rayon knit slips	2	1.95	1	3.90
Rayon crepe slips	2	3.50	1	7.00
Panties	4	.85	1	3.40
Brassieres	4	1.50	1	6.00
Girdle, panty	1	2.98	1	2.98
				\$42.28

LIBERAL ALLOWANCE FOR THE HIGH SCHOOL GIRL'S CLOTHING (Cont.)

ARTICLE	NUMBER	UNIT COST	YEARS OF SERVICE	COST PER YEAR
<i>Accessories and miscellaneous</i>				
Dress gloves	1	\$ 4.00	2	\$ 2.00
Wool gloves and scarf	1	2.98	2	1.49
White cotton gloves	2	2.50	3	1.67
Dark purse	1	5.00	2	2.50
White purse	1	2.98	2	1.49
Handkerchiefs	8	.50	1	4.00
Handkerchiefs, dress	4	1.00	2	2.00
Costume jewelry		5.00	2	2.50
Cosmetics		4.00	1	4.00
Shoe repair		4.00	1	4.00
Dry cleaning		15.00	1	15.00
Miscellaneous		4.00	1	4.00
				\$44.65
TOTAL				\$322.95

vide for the purchase of several such items in any one season, or possibly not in any one year. Large expenditures, such as come from buying more than one coat and one suit in a year, may be disastrous to the family pocketbook. In the clothing plans presented on pages 172 and 173, you will see that in the case of the average girl on a moderate clothing allowance, a spring coat and a jacket are bought once in three years, their purchase being made in different years.

Provision for definite allowance. The second characteristic of a wise clothing plan is that it is definite, based upon a stipulated clothing allowance. It is evident that expenditures based on a clothing allowance of \$500 a year will differ from those based on an allowance of \$100 or less. Wise planning can be done only if the amount of money to be spent for clothes is known and plans are held to this amount. On any other basis the rule is bound to be "Today a feast, tomorrow a famine," or whatever variant thereof that would apply to clothing.

Provision for division of allowance. The third characteristic of a wise clothing plan is that it provides for all the various clothing needs of the girl. Needs for underclothes as well as outer clothing are considered. Needs for school clothes are weighed against needs for party dresses and the demands of the summer wardrobe are weighed against those of the winter wardrobe. Thought is also given as to what garments should be bought ready-made and what, if any, may be wisely made at home. A number of factors will determine the wise decision in this matter, among them being the skill in garment construction of the girl and other family members, the number and kind of other demands

MODERATE ALLOWANCE FOR THE HIGH SCHOOL GIRL'S CLOTHING

ARTICLE	NUMBER	UNIT PRICE	YEARS OF SERVICE	COST PER YEAR
<i>Outer Garments</i>				
Winter coat, brown	1	\$27.00	2	\$13.50
Spring coat, beige	1	12.50	3	4.17
Raincoat or cape	1	4.95	2	2.48
Wool jacket, green	1	4.95	3	1.65
Beret, green	1	1.00	2	.50
Winter hat, brown felt	1	2.00	1	2.00
Spring hat, natural straw	1	2.00	1	2.00
				\$26.30
<i>Dresses</i>				
* Wool dress, plaid	1	\$10.00	2	\$ 5.00
* Dark dress, brown rayon	1	6.50	2	3.25
Spring dress, rayon print	1	6.00	2	3.00
Jersey dress, green	1	5.00	2	2.50
White rayon blouse	1	2.50	2	1.25
* Wool skirt, brown flannel	1	3.50	2	1.75
* Cotton skirt	1	2.00	2	1.00
* Cotton blouses	2	1.00	2	1.00
Twin sweater set	1	6.00	2	3.00
* Summer cotton dresses	3	2.25	2	3.38
* House dresses	3	1.50	2	2.25
* Smock	1	1.50	2	.75
* Cotton formal	1	5.00	2	2.50
				\$30.63
<i>Footwear</i>				
Bedroom slippers	1	\$ 1.98	2	\$.99
Galoshes	1	1.75	2	.88
School shoes, brown calf	2	3.95	1	7.90
White shoes	1	3.95	2	1.98
Dress shoes, brown suede	1	4.95	2	2.48
Anklets	9	.25	1	2.25
Nylon hose	3	1.19	1	3.57
				\$20.05
<i>Sportswear</i>				
Cotton playsuit	1	\$ 2.00	1	\$ 2.00
Gymnasium suit	1	1.75	2	.88
Gymnasium shoes	1	1.98	2	.99
Gymnasium socks	2	.25	2	.25
Jeans	1	3.00	2	1.50
				\$ 5.62
<i>Underwear and lounging</i>				
Cotton housecoat	1	\$ 3.50	3	\$ 1.17
Bathrobe	1	5.25	3	1.75
* Sleeping pajamas	3	1.50	2	2.25
Slip, rayon knit	1	1.50	1	1.50
Slip, rayon crepe	1	2.00	1	2.00
Suits of underwear	5	1.50	2	3.75
(panties and brassieres)				
Girdle	1	1.50	1	1.50
				\$13.92

* Made at home

MODERATE ALLOWANCE FOR THE HIGH SCHOOL GIRL'S CLOTHING (Cont.)

ARTICLE	NUMBER	UNIT PRICE	YEARS OF SERVICE	COST PER YEAR
<i>Accessories and miscellaneous</i>				
Dress gloves	1	\$ 2.98	3	\$.99
Wool gloves	1	.98	2	.49
Dark purse	1	2.00	2	1.00
Light purse	1	1.00	2	.50
Handkerchiefs	8	.15	1	1.20
Cosmetics		3.00	1	3.00
Shoe repair		3.00	1	3.00
Dry cleaning		4.00	1	4.00
Miscellaneous		2.00	1	2.00
				<u>\$16.18</u>
TOTAL				\$112.70

made on the time of the family members, and the total amount of money to be spent for clothing. The division of the allowance will provide not only for the purchase of new garments, but also for the upkeep of the whole wardrobe. The cleaning of rayon and woolen garments and the repair of shoes are activities usually carried on outside of the home,

LOW-COST WARDROBE FOR THE HIGH SCHOOL GIRL

ARTICLE	NUMBER	UNIT PRICE	YEARS OF SERVICE	COST PER YEAR
Tan reversible coat	1	\$10.95	2	\$ 5.48
Sweater	1	2.35	1	2.35
Navy skirt and jerkin of part wool	1	5.98	2	2.99
White blouse	1	1.90	2	.95
Red and white cotton blouse	1	1.15	2	.58
Checked gingham dress	1	2.98	1	2.98
Plain gingham dress	1	2.98	1	2.98
Spun rayon 2 piece red dress	1	5.40	2	2.70
Cotton skirt	1	2.98	1	2.98
Shoes	2	3.50	1	7.00
Anklelets	8	.19	1	1.52
Cotton slippers	3	.59	1	1.77
Panties	4	.39	1	1.56
Brassieres	4	.50	2	1.00
Pajamas	2	1.60	2	1.60
Beret	1	.98	1	.98
Square scarf	1	.98	1	.98
Mittens	1	.79	1	.79
Purse	1	1.00	2	.50
Shoe repair		2.00	1	2.00
Cosmetics		2.00	1	2.00
Galoshes	1	1.50	2	.75
Dry cleaning		2.00	1	2.00
Miscellaneous		1.56	1	1.56
TOTAL				\$50.00

and hence they require cash expenditures which must be provided for in the clothing plan.

Future purchases based on present stock. The fourth characteristic of a wise plan for clothing expenditures is that it must be based upon the clothing on hand. A thorough stocktaking may show several places where mistakes in buying have been made. The sweater that was the wrong color or the shoes that have been set aside because they were uncomfortable are reminders that greater care in selection must be made. A careful check-up may also show that last winter's school dresses are still in good condition and that money usually needed for them might be used to buy the much desired velveteen dress. Certainly you can see that a listing of clothing on hand is essential to wise planning for the future.

SUGGESTIONS TO THE CLASS

1. Jane Scott who lives in a small town in a midwestern state was promised a year ago a month's visit to an aunt as a high school graduation present. The aunt lives in a city at some distance. Jane's family has held its expenditure for clothing to a moderate level. How can a plan for the year be worked out whereby Jane may be provided with clothes suitable for train travel and for wear in a city without placing too heavy a drain on the family purse?

2. List some examples of impulsive buying of clothing. What were the results?

3. A need for two new dresses has arisen for the high school girl, placing unusually heavy demands upon the family clothing budget or upon her mother's time if the dresses are to be made. What must be considered in choosing between home construction and purchasing ready-made?

4. Calculate the proportion of the moderate clothing budget found on pages 172-173 that is allowed for outer garments; for dresses. Work out the proportions for other garment classifications. Compare these figures with similar ones for the liberal and low-cost budgets given on pages 170-171 and page 173.

3. How may a clothing plan be put into operation?

A clothing plan provides a view of what your wardrobe has been and what you expect it to be. Such a plan usually covers a three-year period because a number of articles are purchased only at this interval. Before you can plan for future purchases, an inventory of your clothing must be taken.

Briefly, a clothing inventory is a detailed list of the clothing on hand, with information concerning the condition of each article, the years of service it has given, and, if desired, the initial price paid for it. Such an inventory shows at a glance the relative strength and weakness of the wardrobe, and may give evidence of poor investments previously made.

In making the inventory, only those articles which are actually wearable at the present time are listed. It will be helpful to classify them as to the type of garment and as to the season when worn. The inventory provides an opportunity for appraising the wardrobe from an angle quite different from the mere accounting of numbers of garments. If color as well as type and purpose of the garments is listed, it will be possible to see whether a plan for harmonious combinations lies back of your purchases. It may reveal that there is no one basic color, and that the wardrobe is in reality a hodge-podge of unrelated hues. Experience has shown that it is possible to achieve pleasing combinations of hats, coats, dresses, and shoes if a color such as brown, beige, or navy blue predominates in the clothing plan.

Accounting should be made also of the accessories on hand. Make note of the costume for which each is intended. Do you find that you possess beads, bracelets, or other jewelry that seem unrelated to any costume? A complete record will show either wherein you have bought unwisely or wherein accessories on hand may help to complete costumes which you expect to purchase.

A sample chart combining the inventory and a plan for future purchases is given on pages 176-181. Such a plan may be set up on additional sheets of paper so that it will be possible to gain a complete picture of clothing on hand, replacements, and anticipated additions.

Having made the list, the cost of the items should be entered under the heading **CLOTHING ON HAND**. Write in under **ARTICLES IN THE WARDROBE** such descriptive words as will identify the garments for you and help you in planning the purchase of accessories or additions to the wardrobe. When you have all the prices listed, the columns may be totaled to determine the value of your present wardrobe.

To make plans for future purchases, it will be necessary to decide upon the amount that can be spent for clothing in one year. Your share of the family's allotment for clothing must be calculated. We will assume that the family's earnings total \$2400 a year. Perhaps 11 per cent of this will be spent for clothing. That means there will be \$264 to be divided among all the family members. If we use the scale devised by Miss Cowles (p. 164), your father will use up 1 unit for clothing; your

(Continued on page 181)

PERSONAL WARDROBE

ARTICLES IN THE WARDROBE	CLOTHING ON HAND	PURCHASE PRICE		
		Bought This Year	Bought Second Year	Bought Third Year
<i>Outerwear</i>				
1. Coats: Winter				
Spring				
2. Suits: Winter				
Spring				
Summer				
3. Jackets, sweater-coats				
4. Raincoat				
5. Umbrella				
6. Active sportswear: Swim suits				
Gym suits				
TOTALS				
<i>Innerwear</i>				
1. Dresses: A. Street and school Winter				

PERSONAL WARDROBE (Cont.)

ARTICLES IN THE WARDROBE	CLOTHING ON HAND	PURCHASE PRICE		
		Bought This Year	Bought Second Year	Bought Third Year
Spring				
Summer				
B. Afternoon Winter				
Spring				
Summer				
C. Formals Winter				
Spring				
Summer				
D. House Winter				
Spring				
Summer				
2. Skirts				
3. Sweaters				
4. Blouses and shirts				
TOTALS				

PERSONAL WARDROBE (Cont.)

ARTICLES IN THE WARDROBE	CLOTHING ON HAND	PURCHASE PRICE		
		Bought This Year	Bought Second Year	Bought Third Year
<i>Underwear and Nightwear</i>				
1. Slips: Street and school				
Formal				
2. Shorts				
3. Brassieres				
4. Girdles				
5. Pajamas and nightgowns				
Winter				
Summer				
6. Housecoat and robes				
Winter				
Summer				
TOTALS				
<i>Footwear</i>				
1. Shoes:				
A. Street and school				
Winter				
Summer				

PERSONAL WARDROBE (Cont.)

ARTICLES IN THE WARDROBE	CLOTHING ON HAND	PURCHASE PRICE		
		Bought This Year	Bought Second Year	Bought Third Year
B. Afternoon Winter				
Summer				
C. Evening Winter				
Summer				
D. Bedroom				
E. Sports				
F. Galoshes				
2. Hose:				
A. School and street				
B. Afternoon and evening				
C. Sport				
TOTALS				
<i>Accessories</i>				
1. Hats:				
A. School Winter				
Summer				

PERSONAL WARDROBE (Cont.)

ARTICLES IN THE WARDROBE	CLOTHING ON HAND	PURCHASE PRICE		
		Bought This Year	Bought Second Year	Bought Third Year
B. Street, afternoon, or dress Winter				
Summer				
2. Gloves:				
A. School and street Winter				
B. Afternoon Winter				
Summer				
C. Evening Winter				
Summer				
3. Purses:				
A. Street and school Winter				
Spring and summer				
B. Afternoon Winter				
Spring and summer				
C. Evening				

PERSONAL WARDROBE (Cont.)

ARTICLES IN THE WARDROBE	CLOTHING ON HAND	PURCHASE PRICE		
		Bought This Year	Bought Second Year	Bought Third Year
4. Handkerchiefs				
5. Ties				
6. Scarves				
7. Belts				
8. Costume jewelry				
TOTALS				

mother .9 unit; you, as a daughter fifteen years of age, 1.2 units; and your twelve-year-old brother .6 unit. The units assigned the various family members total 3.7. This means that \$264 should be divided by 3.7 to learn what is the value of 1 unit. The amount is roughly \$71.35. Your father, then, will be allowed \$71.35 for the year for his clothing, and your mother's share will be \$64.21. Your share will be \$85.62, and your twelve-year-old brother will be allowed \$42.81.

This income and the family make-up may, of course, not be identical with your own. However, if you will take your family income as a basis, it is possible for you to calculate what your own share should be by following this procedure. Having done so, start making your plans for future spending. Overspending is easy for many of us. If you consult the budgets on pages 170-173, you will find there some suggestions that will be helpful in holding your spending plans within the accepted limitations.

SUGGESTIONS TO THE CLASS

1. Take an inventory of your clothing, listing only those articles actually wearable. Calculate the value of articles on hand.
2. Determine the amount that your family should spend for clothing.

Using the plan devised by Miss Cowles for dividing the clothing allotment among the family members, determine what your yearly allowance will be.

3. Plan your clothing for the next three years so as to hold your expenditures within the amount previously determined.

4. How may the girl's clothing plan affect her relations with other family members?

Has it ever occurred to you that planning one's clothes might bring other returns than the most satisfactory wardrobe possible under existing conditions? Such is the case. One might say that the other satisfactions are the most important because they come from the inner life of the family, upon which most all of us depend for the strength, courage, and growth of our personalities. Let us see how certain satisfactions in home living are inevitably increased if we plan wisely the expenditures for our clothing needs.

Family unity. In the first place, wise plans require a knowledge of the family income and family financial problems. We are reminded again and again by newspaper and magazine articles that the division of wealth among the 46½ million families in the United States in 1946 was such that 60 per cent of all families received \$2000 or more as the joint earnings of the different family members. Only about 6½ million families had incomes at this level in the middle 30's. About 50 per cent of the spending units, that is the persons living in the same dwelling who pooled incomes to meet major expenses, had incomes between \$2000 and \$5000 in 1946. For the same year, about 10 per cent of such households had annual incomes of \$5000 and more. The remaining 40 per cent had incomes of \$2000 and below. Various estimates have been made of the size of the income necessary for a standard of health and decency. It is evident that many families have far less than is needed, especially where there are several children to be cared for.

There is a deepening of family spirit and mutual helpfulness that comes from knowing what the family income is and then formulating and maintaining clothing plans so that only a fair proportion of that income is used. Failure to recognize this relationship causes one to miss much of the joy of group life. One may have either the satisfaction of planning as a member of this family or the sorrow of having added to the worry and stress of the financial problems of the family by doing

otherwise. The cry, "All the other girls have it, and I think you're mean not to buy it for me!" has the power to hurt the father or mother who must refuse the demand.

Playing fair. Wise expenditure of money for the clothing budget of the high school girl can be determined only by due consideration of the clothing needs and desires of the other family members, in terms of the money available for the entire family clothing budget. The amount the high school girl spends for her clothing should not greatly exceed that spent by her mother. It is true that in youth the desire for possessions and for group approval is strong. Also, self still looms large as the center of interest and activities. It is difficult, perhaps, to see that the need for fairness in one's relationship with others is as important as one's keenly felt need for a new party dress or "the latest in coats." Only as one is able to develop ability in weighing non-material values against material possessions can one become adult and reasonably wise in determining a fair division of the family clothing budget among the various members. Long ago a wise philosopher said that *justice* was having and doing what was one's own. Perhaps justice is one of the most important considerations in successfully dividing into individual clothing budgets the amount of money that may be spent for clothing.

Wholesome attitudes. Habits of sharing, a sense of fair play, and due consideration of others are important by-products of a carefully laid clothing plan. There are other desirable attitudes that will be developed if thought is given to individual and family clothing needs. Consideration will be given to such matters as having enough without waste, quality rather than mere quantity, suitability for the purpose, and the effort required for care and upkeep. The attitudes taken toward these angles of the clothing plan will either make for or destroy satisfactory relations with other family members. Well-chosen clothing contributes to happiness of people; it may affect their development as members of the social group. It also reflects the tastes and ideals of the wearer and serves as a measure of one's sense of values.

SUGGESTIONS TO THE CLASS

1. Suggest satisfactions to be gained by the high school girl through the use of a clothing budget. Similarly, suggest satisfactions to be gained by the family through the use of a clothing budget.
2. List some of the results of overspending for clothing. What are some of the common reasons for overspending?

3. Attitudes toward dress may affect a plan for clothing purchases. Suggest those attitudes that will result in satisfactory relations with family members. What are some attitudes that will result in a lack of harmony?

SUMMARY

Clothing expenditures may be of several sorts: expenditures of interest and ability in determining what clothing is becoming, what purchases are desirable; expenditures of time and effort in taking account of the present wardrobe and maintaining the clothes in good condition; and last, but not least, the expenditure of money to purchase garments and accessories listed as desirable for the wardrobe in the clothing plan.

The amount of money to be spent for clothing may be determined by taking into account the essentials for decent living, the size of the family income, the number and age of the persons in the family, and the special clothing or other needs arising in the lives of each. When the amount of money available has been determined, a plan may be worked out which will provide a definite amount for clothing expenditures for each person. This plan will arrange for a distribution of major items throughout the year; will suggest which garments may be made at home and which should be purchased ready-made; and will relate plans for purchases to the clothing on hand as determined by a clothing inventory.

Such a plan has often proved most helpful in developing understanding between the girl and other family members, particularly with her mother. It helps keep "first things first."

Desire for clothes should be governed by a real appreciation of the clothing needs of other family members and by consideration of the many other needs of the entire family that must be met from the income. Wholesome attitudes, real understanding, and a desire to "play fair" are as essential as money to the making of a sound clothing plan.

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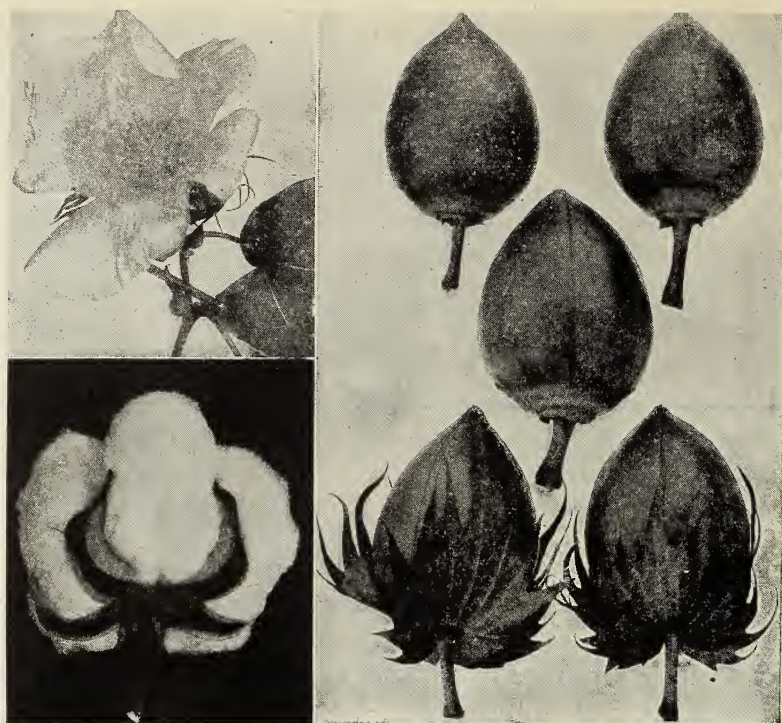
Selecting Fabrics

We are told that over eight billion square yards of cotton fabric alone are manufactured in this country annually, and that the number of different kinds of fabric included in this yardage is between sixty and seventy. These figures may make us realize how difficult it is to choose fabrics wisely. Fabrics are made from all the common fibers—cotton, linen, wool, silk, and synthetic fibers—in a variety of sizes and types of yarns and of differing weaves and finishes. It is easy to see that there is much information to be obtained before one can choose wisely among the many possibilities.

1. *What are the common fibers from which our fabrics are made?*

The fiber of which the yarns are made affects the desirability of the fabric. The common fibers used in fabrics are cotton, from the fluff about the seed of the cotton plant; linen, from the stalks of flax; wool, from the coats of sheep; silk, both wild and cultivated, secreted by the silkworm and formed as the continuous fine filament or fiber that makes the cocoon for the resting stage in the development of the silkworm; and the synthetic fibers, whose manufacture has resulted from the long and laborious efforts of man to produce something like the silk fiber. Ramie, derived from a grasslike plant, and mohair, from the coats of goats, are fibers in less common use.

Each fiber determines in part the characteristics of the fabric made from it, and knowledge of what characteristics one desires of the fabric leads one to make his choice in part on this basis.



Stages in the development of the cotton boll. *Top left:* Flower. *Right:* Green unopened boll. *Bottom left:* Open boll.

Production of cotton fabrics. A wise selection of durable cotton fabrics is based on a knowledge of the nature of cotton and the essential steps in its manufacture into cloth. Most people who live in the South are familiar with the cotton plant and with its flowering and fruiting. First the creamy white blossom appears, and then the green boll. When the boll ripens it bursts open, revealing the cotton fibers in which the seed is firmly imbedded. These fibers should be picked soon after they mature to prevent spoiling by sun and rain. The cotton fields may have to be gone over several times to insure the harvesting of the cotton fibers in good condition. If the fibers are left long exposed to sun and rain, they are greatly discolored. The picking is usually done by men, women, and children, who go down the rows of cotton gathering the fluff from the open bolls into sacks or baskets. The cotton is then taken to gins, where the fibers are separated from the seeds and are pressed into bales. These bales are shipped to the factories, where the cotton is made into either thread for sewing or yarns to be woven into cloth. If cloth is made, the following are the important steps in its manufacture from the bales of cotton:



Flax retting scene. Crates are covered with straw and weighted down with stones. The bundles of straw are ready to be placed in the crates.

Cleaning: Freeing the fibers from dirt, leaves, and stems that may be entangled with them.

Carding: Thoroughly cleaning the fibers, untangling them, and laying them parallel to the length of the strand.

Combing: Freeing long fibers from the short ones, which are taken as cotton waste.

Drawing: Reducing the diameter of the strands of carded or combed fibers.

Spinning: Several processes which draw out the strands and twist them into yarn.

Winding: Placing the yarn on spindles or in hanks for the weaving process.

Weaving: Constructing fabric by interlacing at least two sets of yarns, one warp and one filling, at right angles to each other.

Finishing: Removing knots and mending, setting the yarns at right angles, cleaning the fabric, bleaching and dyeing it, pressing it, and other treatments affecting the appearance and properties of the cloth, including printing.

Linen production in colonial times. The girl of long ago was well acquainted with the processes of manufacture of linen fabrics. Some part of her father's farm or that of a near-by neighbor's was set apart for the growth of the slender, blue-flowered flax plant. Its stalk held the fibrous bundles which, after various treatments, were freed from it, twisted,

COTTON FABRICS

NAME	WIDTH IN INCHES	APPEARANCE	USES
Balbriggan	36	Fine- or coarse-knit fabric	Pajamas, underwear, sweat shirts
Batiste	36-44	Fine, sheer, silky, soft	Children's clothes, underwear, blouses
Birdseye	18-30	Characteristic weave of twisted yarns	Diapers
Broadcloth	36	Closely woven, fine luster, mercerized, shows crosswise rib	Underwear, clothes for children, shirts
Calico	25-30	Coarse, much sizing, usually loosely woven	Dresses, aprons
Cambric	36	Plain weave, glossy, closely woven	Underwear, aprons, shirts
Canton flannel	27-36	Twill weave, napped on one side	Sleeping garments, diapers, linings, and household uses
Chambray	36	Plain weave, colored warp yarns, white filling	Dresses, work shirts, and children's play clothes
Cheesecloth	36-40	Thin, loosely woven fabric, plain weave	Bandages, costumes, curtains
Crash toweling	15, 16 18, 20	Plain or twill weave, rough, loosely spun yarns	Towels, dresses, runners
Cretonne	27-54	Printed fabrics in varieties of weaves and finishes	Hangings and upholstery
Crinkle crepe or plissé	29-36	Thin, plain weave, puckered stripe or all-over blistered effect	Underwear, dresses, children's wear
Corduroy	36-40	Kind of cotton velvet having ridges in the pile	Suits, trousers, bathrobes, upholstery
Dimity	32-36	Lightweight, plain weave, corded stripes or bars	Undergarments, pajamas, dresses
Dotted swiss	28-36	Fine, sheer, plain weave with dots of extra yarns	Dresses, aprons, curtains
Gingham	27-36	Yarn-dyed fabric woven in checks, plaids, stripes, or plain color	Aprons, shirts, and dresses
Glass toweling	15-22	Plain weave with colored checks	Towels for drying glassware
Huckaback	15-24	Characteristic weave having rough surface	Towels
Indian Head	36 18-63	All colors, plain weave, coarse yarn, also white	Dresses, uniforms, play suits, tablecloths
Khaki	28	Twill in khaki color	Scout uniforms, riding suits

COTTON FABRICS (Cont.)

NAME	WIDTH IN INCHES	APPEARANCE	USES
Lawn	24-45	Light, thin, plain weave, usually sized	Dresses, blouses, curtains
Lingette	36	Soft, mercerized sateen with self-color stripe	Linings, pajamas, slips
Longcloth	36	Soft, fine, lightweight	Baby dresses, underwear
Madras	36-50	Plain weave, woven figure	Shirts, blouses, pajamas
Marquisette	36-50	Open, loose appearance	Curtains
Muslin	36-72	Usually closely woven, firm	Bed linens
Nainsook	36-45	Soft, lightweight, firm	Infant's wear, lingerie
Oilcloth	45-54	Fabric coated with a preparation of linseed oil and pigments	Table and shelf coverings, trimmings
Organdy	36-70	Crisp, transparent, usually fine	Trimmings, dresses
Outing flannel	27-36	Napped, warm, soft	Infant's wear, sleeping garments
Percale	36	Printed material, stiff finish	Dresses, aprons, and shirts
Piqué	27-36	Heavy, firmly woven, ribbed	Trimmings, skirts, dresses
Poplin	27-36	Durable, ribbed	Dresses, skirts, uniforms
Prints	30-36	Smooth, rather dull, firmly woven	Dresses, aprons, children's clothes, pajamas
Ratiné	36-54	Loosely woven, rough appearance, plain weave	Dresses, suits
Rep	27-50	Heavy, mercerized, ribbed fabric	Upholstery, drapery, suits, coats
Sateen	30-50	Mercerized, satin weave	Linings, slips, draperies, comforters
Seersucker	29-36	Lightweight, crinkled, stripes	Dresses, men's summer suits
Suiting	48-56	Plain twill or fancy weave	Women's suits
Tarlatan	54-60	Thin, open, highly sized, plain weave	Millinery, costumes, Christmas stockings
Terry	18-24	Loops on both sides, looped pile weave	Turkish towels, pillows, hangings
Ticking	32-60	Closely woven, firm; satin, twill, or plain weave	Ticks and pillows
Voile	36-40	Soft, thin, usually fine	Lingerie, dresses, and curtains



Colonel W. B. Bartram

Dressing and grading the flax fiber in preparation for spinning.

and spun into the yarns from which the linen cloth was later woven. Perhaps the brook that babbled through her farm had been led into a quiet pool where the pulled and stripped flax plants were soaked for about two weeks so that the outer part of the stalks could be rotted or retted away from the fiber. The girl herself may have had the task of breaking the dried retted flax stalks, separating the woody part from the fibers. Next she may have had the task of breaking the stalks further to free the fibers, by scutching, as the beating was called, and of separating them from the chaff and bits of dried woody part that might still adhere to them. Later the fibers were hackled, the short tow being separated from the long fibers.

Perhaps the men of the family might take over some of the tasks from pulling to hackling; but from this point on the daughter would surely share the work, twisting the fibers into strands, spinning the strands into yarns, and weaving the yarns into cloth. With her mother she would spread the grayish tan cloth, woven from the linen yarns, on the meadow so that the dew from the grass and the rays of the sun together might change its drab color to a snowy white.

A girl who was thus aware of every step in the process of the manufacture of linen fabrics would have an unequaled basis for making a wise choice in selecting material. Unevenness of yarns, faulty bleach,

the addition of starch or other sizing, would all be readily apparent to her because of her long familiarity with all the steps in the production of linen.

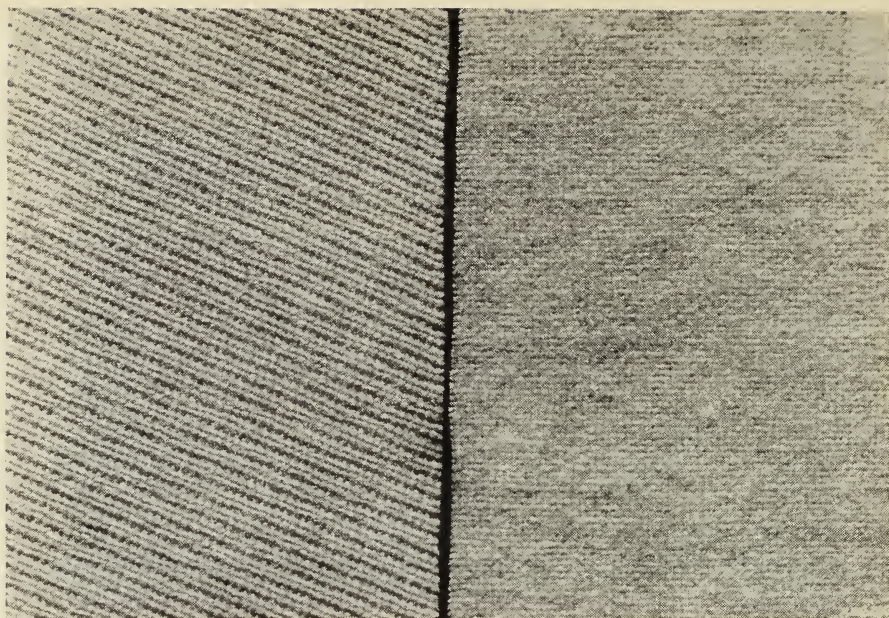
Linen production today. Except in rare cases, the preparation of flax fiber and the spinning and weaving of linen have passed from the home to the factory. Today the production of linen is largely carried on in Belgium, Ireland, and Russia, and the modern American girl rarely has any contact with the growing of flax or with the various steps by which the fibers of its stalk are transformed into fabrics. They are, however, essentially the same as those used in years gone by.

With the Industrial Revolution, cotton began to have increasing importance in the making of fabrics, soon replacing linen on the market. However, linen remained a favorite for such household fabrics as tablecloths and napkins. Because linen tailors well it has been much sought after for men's summer suits and for women's sports apparel. This has led some manufacturers to attempt finishes of cotton and combinations of cotton and linen that might be successfully marketed as linen.

Today fabrics made of rayon alone or in combination with other fibers are used for many articles for which linen was once considered the only suitable material. This shift has been brought about more rapidly because of the numerous difficulties of obtaining linen from war-torn Europe.

Early production of wool fabrics. Most of us in our childhood days knew the nursery rhyme "Baa, baa, black sheep, have you any wool? Yes sir, yes sir, three bags full." Few of us know whether three bags of wool constitute a normal yield from one sheep or three. Neither can most of us relate, step by step, the processes through which the clipped wool must pass after being sheared from the sheep before it is made into the fleecy fabric for a sports coat or the soft warm material for a school coat. These processes were well known to the colonial girl. She knew from her father's discussion whether this year's yield of wool was of good quality or poor, and how it compared with that of the neighbor's. Perhaps she helped with the sorting of the fleeces, carefully placing as best the wool from the shoulders and sides; as next best, that from the back; and as poorest, that from the thighs and legs. Familiar with the smell of the natural oils with which the fleece was laden, she may have assisted in the washing of the assorted fleeces, scouring the wool so that the blankets and dresses to be made from it would be free from the unpleasant odor.

The dried, washed wool was then carded and drawn into yarns which



A woolen and a worsted fabric are compared. *Left:* The weave is quite evident in the worsted. *Right:* Note that the nap hides the weave of the woolen material.

later were spun until they received the twist thought desirable for the weaving or knitting in which they would later be used. All of this was part of the usual work of the colonial home.

The fabric or knitted article that was made from the home-manufactured yarns was appraised by the family members for the evenness of the spun yarns, and for the smoothness and regularity of the weave or knit. The fabric was finished by bleaching to remove the natural color of the wool, dyed with the simple homemade vegetable dyes which were readily taken up by the wool fiber, and then washed, dried, and stretched. The colonial girl's background equipped her so that had it been necessary for her to buy wool fabrics from a neighbor she would have had a sound reason for her choice.

Present-day manufacture of wool fabrics. Wool fabrics, as is true of cotton and linen, are no longer made in the home. The processes of preparing the wool for spinning, its twisting and drawing out into yarn, and its weaving into cloth are now all taken over by woolen mills.

The character of the yarn used exerts a great effect on the fabric. Woven wool fabrics are commonly classified as woolens and worsteds, the difference between the two being due to the character of the yarn used and the finish which may be given to fabrics woven of yarn of each

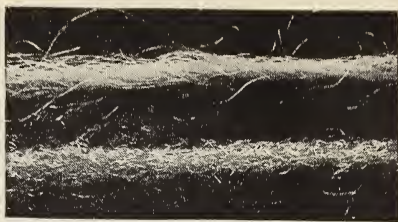
kind. Woolen yarns are usually soft and fuzzy, including many short fibers tangled and crisscrossed. The worsted yarns are more or less tightly twisted, firm, and smooth, with fairly long fibers that lie parallel when the yarn is untwisted.

Woolen yarns. The woolen yarns, which are soft and bulky but not strong, are often used for fabrics of

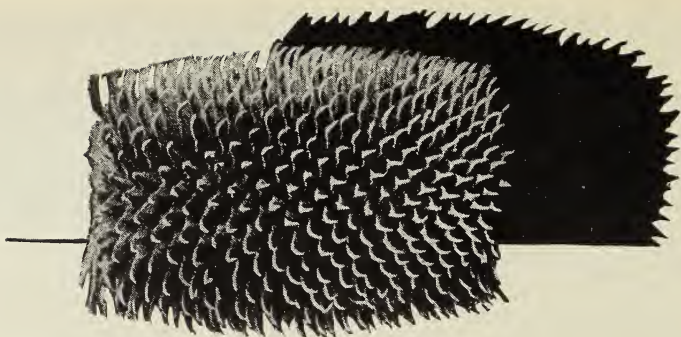
plain or twill weave that can be felted and finished with a nap. Blankets and broadcloth are examples of such use. The napping is done by passing the fabrics over a revolving cylinder covered with burs of a certain sort, known as teasels, or with many fine bent wires. These scratch at the surface of the cloth, bringing many of the loosely held ends of the fibers to the surface, thus increasing its feeling of softness and its ability to enmesh air and hence afford increased warmth. The nap produced by this process may be left as brushed up by the teasels, as in blankets, or it may be clipped to evenness, pressed flat, and given a high gloss, as in broadcloth. It may be caused to curl by still a different kind of finish, producing the chinchilla fabric so popular for children's coats.

Worsted yarns. The worsted yarns made of long fibers arranged parallel and tightly twisted are well suited to the construction of firm, lightweight, and durable fabrics. Just by the nature of the yarn and the firm weave which it is usually given there is produced a smooth surface of hard finish that makes these fabrics notably durable and easy to keep clean. Serge is a worsted commonly used in schools which require uniforms for all students. Its hard surface makes it tend to become shiny with wear, but its durability is far above that of most fabrics made from wool yarns. Again we find synthetic fibers replacing the wool fibers in fabrics of this type.

Finishes. Finishes important to know about in relation to woven wool fabrics include a new method of shrinkage which is applied to the fabric, and which successfully prevents the shrinkage that frequently attends the dry cleaning of wool garments. Fabrics given this finish are slightly higher in cost than those not so treated, but their purchase may constitute a real saving. Such fabrics are commonly labeled as non-shrinkable. Unless the label is accompanied by a guarantee by the manufacturer, it may not signify that the fabric is as labeled.



Woolen and worsted yarns. The fibers in worsted yarns lie practically parallel; in woolen yarns the fibers lie in every direction.



Kenwood Wool Products

A vegetable teasel is sometimes used in napping woolen fabrics.

Reused and reprocessed wool. A fabric often deceptive to inexperienced shoppers is that made of "reworked wool," often termed "shoddy." Itinerant purchasers and junk-yard dealers collect worn-out clothing and sort out the wool garments to be sent to mills, where they are reworked to wool fibers. These fibers are subjected to the steps necessary for making woolen yarn, and are then woven into fabrics. In such fabrics there may be fibers other than wool. When these fabrics are examined, the fibers appear irregular and show broken ends and flattened scales. To cover irregularities, the fabric is usually brushed with the teasels, and sometimes other materials are worked into the surface during the finishing process. The durability of reused wool fabrics depends largely upon the condition of the original wool fibers, and also upon the process used in their salvage. Fabrics made with a high percentage of fibers other than wool, and nonpermanent finishes used to deceive, have been found "short lived" and have tended to place reused wool in discredit. Honest labeling in such cases would have been of mutual benefit to producer and consumer, for poor durability may have been caused more by the adulterants present than by the use of reused wool.

Knitted fabrics. Wool is often used in making knitted fabrics. Yarn for knitting should be soft, only slightly twisted, elastic, and uniform in size. The fabric that results from knitting varies in weight, compactness, and finish with the yarn used and the knitting stitch employed. Knitted fabrics tend to be more elastic than most other wool fabrics and present unique problems in the care needed. Knitted garments should be folded when stored rather than hung on hangers. Otherwise they tend to pull out of shape and stretch. A dresser drawer lined with heavy paper serves as a convenient place for keeping knitted wear.

WOOL FABRICS FOR COMMON WEAR

DRESSES (SCHOOL AND BUSINESS)	COATS	SWEATERS AND SPORTSWEAR
Novelty weaves Crepe Flannel Tweed Challis Cashmere Serge Gabardine	Broadcloth Tweed Flannel Novelty weaves Gabardine Serge Chinchilla Cheviot Camel's hair	Jersey Knit fabrics Flannel Novelty weaves Serge Bedford cord

Silk, the fabric of royalty. In ancient times only a very few people were faced with the problem of making a wise selection of silk fabrics. The Chinese emperor and a few of his nobles were all who were allowed to wear silk. Only a small number were engaged in its manufacture, and the great mass of the population never knew the touch of silk. In Revolutionary War days in our own country, trade routes had opened up and sea captains from New England's ports came home from the Orient with bundles of beautiful, heavy silk in strangely carved chests. Many housewives hoped for a good silk dress to wear on Sunday and to be buried in. Black was the favorite color because it was durable. Some more fortunate women had more than one silk dress; in this event the black silk dress was supplemented by one of a delicate gray or blue.

From ancient days to the Industrial Revolution the making of silk fabrics involved many hand processes that were time consuming and laborious. The silkworm, the fibers of whose cocoon are reeled, yielding the fine weblike filaments of the silk fiber, was raised in the simple homes of China, Japan, and India. Every stage in the life of the silkworm was carefully observed, from its feeding on fresh mulberry leaves to its metamorphosis into a cocoon made of layer upon layer of the silk fibers, arranged in an almost perfect figure eight. The reeling of the cocoons and the degumming of the silk was done by hand labor in the home, and then the yarns were given a twist, wound, and finally woven into fabrics on simple hand looms. The making of fabric from silk has never been one of the household tasks in this country, however. We have always depended upon countries across the seas for this much prized material.

The industrialization of silk production. The Industrial Revolution, which led to rapid replacement of man power by machine power in other textile industries, did not at once affect the first phases of the



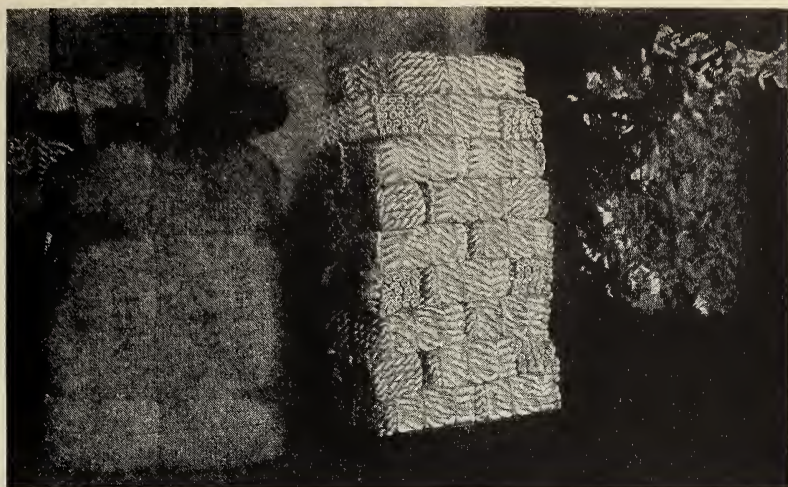
The Silk Association of America, Inc.

The cultivation of the silkworm. *Top*: Silkworms feeding on mulberry leaves. *Bottom*: Cleaning the trays on which silkworms are kept.

production of silk, such as the cultivation of the silkworm and the reeling of the cocoon. The weaving of the yarns into cloth, however, eventually became mechanized. Silk was increasingly shipped from the Orient as yarn rather than fabric. Large factories for power weaving were established in France and other points on the Continent.

Silk fiber has not yet been produced commercially in the United States. When world conditions are such as to make the importing of silk easy, it is, however, used in large quantities in our country. When world conditions are such that traffic in silk is difficult or impossible, our consumption of synthetic fabrics increases proportionately.

Weighting. The industrial production of silk fabrics also made possible the introduction of weighting into silk as a part of the finishing process. This is done by dipping the material into a solution of metallic



The Corticelli Silk Co.

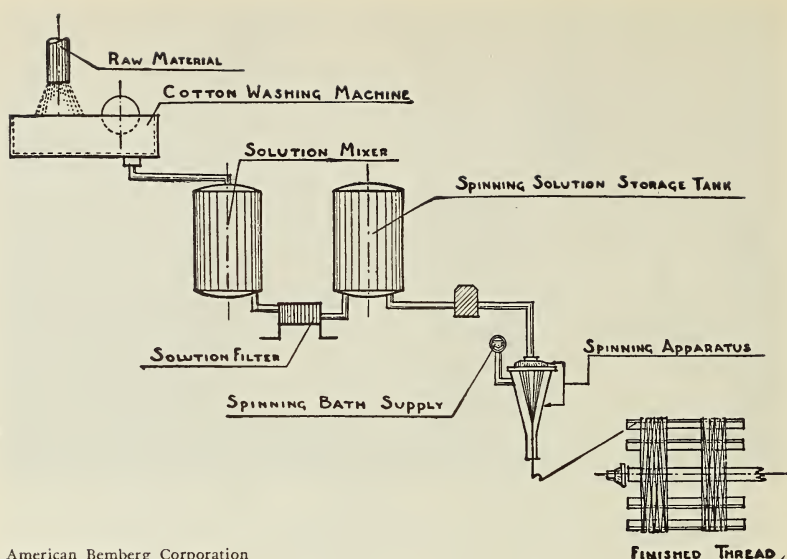
Silk is shipped from the Orient in bales, "books," and skeins.

salts. The silks so processed seem as heavy as those made to be presented as tribute to the emperor of long ago, but they are short lived, and give relatively poor service. Silks that crack along a seam or split on the crease of a fold or tuck are familiar examples of the effect of weighting on the serviceability of silk. Ten per cent of weighting may be added in the finishing without the fabric being characterized as weighted. Silks having no more weighting than this are labeled pure dye silks. Synthetic resins are now sometimes used to finish silk fabrics. They add to the weight but do not seem to cause splitting.

Stretching and treating. Do you like the rustle of silk? This is to some extent a natural characteristic of silk fabric, but often it is greatly increased by stretching the fabric and treating it with a dilute acid. This treatment also tends to enhance the natural luster of silk.

Fabrics made from silk. A wide variety of fabrics are made from the silk fiber, from the fine chiffon, crepe de Chine, and georgette to the heavy satin, taffeta, and velvet. The three most common weaves are the plain weave, found in chiffon, taffeta, and crepe de Chine; the satin weave, found in the glossy fabric of that name; and the pile weave of velvet.

Man-made fibers. The development of synthetic fibers which would enable man to make a fabric that would rival silk at a low production cost has been an age-old dream. Its accomplishment is one of the great achievements of our time. There is on the retail markets today a wide variety of synthetic fabrics. They are so beautiful in texture and design



American Bemberg Corporation

This diagram shows the steps whereby one type of rayon is produced.

that they might be unquestionably accepted by the public as silk. Others, from the same mills, seem like fabric from fine wool. Dish towels, drapery fabrics, table damasks, bed spreads, as well as dress fabrics may all contain synthetic yarns. Manufacturers of the synthetic fabrics have been wise enough to realize that the ultimate advantage to their trade lay, not in creating a substitute that might pass as another fiber, but in creating an appreciation of and an interest in the synthetic fabrics for their own worth. Such manufacturers have been eager to announce the advantages of the synthetic fabrics. They are ready to offer suggestions for their cleaning and care in line with the best knowledge available, and to provide a wide variety of interesting fabric designs at prices lower than those charged for silk and wool. The result of this astute policy has been a general acceptance of synthetic fabrics by the public.

Rayon. There are four methods of manufacture of rayon, in each case the basis is cellulose—usually cellulose in the form of wood pulp or cotton linters which have been cleaned chemically, dissolved, purified, bleached, and forced through fine openings into a fine, tenuous filament that solidifies on contact with the air. These filaments are twisted into yarns. Of the four methods of manufacturing used, the following three may be grouped together as being means of regenerating cellulose, yet changing it from the form it holds in cotton linters and tree trunk or wood pulp to a fine filament.

The *Chardonnet* or *nitrocellulose process* was the first method used and is now largely replaced by other types.

The *cuprammonium process* receives its name from the chemical processes involved.

The *viscose process* is least expensive and is most common.

In addition to the rayon fibers made by these three ways of regenerating cellulose, there is still another fiber which is a cellulose derivative—namely, cellulose acetate. Makers of this fiber claim that it is superior in evenness of surface, fineness of filament, and in other important qualities. According to disinterested authorities, the cuprammonium process gives a product that approaches silk in fineness and other qualities.

Rayon fibers have been found to be only about half as strong as silk or cotton, and they lose their strength rapidly because they absorb water. A hot iron may have no effect on the regenerated cellulose fibers, but may cause fibers of cellulose acetate to melt.

Types of rayon fibers. If one is to make a wise choice of a rayon fabric and give it intelligent care in use, it is necessary to be informed concerning the type of fiber to be found on the market. Rayons may be labeled as such and may bear a trade name, but rarely do these indicate the method of manufacture. A classification of certain well-known brands of rayon, based on the method of manufacture, follows:

Cuprammonium—Bemberg.

Viscose—Viscosa, Crown, Cisa, Du Pont, Chatillon, Acme, Kasema.

Cellulose-acetate—Celanese, Seraceta, Sombreceta, Acele.

SUGGESTIONS TO THE CLASS

1. Visit a plant where fabric is being made. Are all the processes, from handling the raw fiber to finishing the product which is ready for use, carried out in this plant?
2. Prepare an exhibit of the textile fibers most important in the clothing industry.
3. Make a collection of hand woven materials. What textile fiber is represented most often?
4. Obtain some silkworm eggs. Watch for them to hatch, then feed them on mulberry leaves until they are ready to spin their cocoons. How long does it take for them to reach maturity?
5. Examine materials made of wool fiber until you are sure that you are able to identify at least ten different fabrics. Can you tell the difference between wool material and worsted material? Which of the materials that you can name are staples? Which are novelties?

2. How does the use of a fabric determine its choice?

Suppose you were given the full responsibility of choosing the materials to make your school costume. What would you have to consider? Would you think first of the fiber from which the fabric was made? Would it be the color or perhaps the design in the fabric that becomes the basis for your choice? Really your choice is made on the basis of a number of these things, each one of which helps you to decide that the fabric is suited to its use. There are certain requirements to be met if a fabric is satisfactory for its purpose. Let us analyze our requirements to see what qualities we look for.

Appearance. Most of us will consider appearance first. What is meant by appearance? Much more is involved than the color of the fabric or the plaid design that is "just what the other girls are wearing." There is the texture and the quality of material also. In fact, both may affect greatly the appearance of a fabric and will also serve to determine its suitability. Fine, smooth, delicately colored fabric suggests the dainty garment that will require careful handling. The firm, sturdy fabric, perhaps somewhat rough in texture, suggests one that will withstand hard service—a school costume for example. Good quality is to be found among the rough textured, sturdy fabrics, as well as among those that must be given special care in handling. There are good quality fabrics made of all the fibers, and fabrics made of each fiber are suited to nearly all purposes. Whatever the purpose served, whether the fabric is made of cotton or of wool, whether the fabric costs little or much, it must have a good appearance if it receives our favorable consideration.

Durability. The good appearance that we expect of the fabric when it is new should be a quality that is lasting. In other words, the fabric must be durable or serviceable. By this we mean that it must withstand wear and cleaning and still be in good condition. It must not stretch out of shape, lose color, nor wrinkle or soil easily.

Comfort. Fabrics must also be comfortable. Sometimes this means smooth and soft. Often we are interested in knowing that the fabric is cool and lightweight or that it feels warm. Even though a fabric may have an appearance that is well liked and we have been assured that it will give good service, if it lacks the qualities which make it pleasant to touch and comfortable to wear it will seldom be chosen.

Importance of quality to use. We have said that good appearance, serviceability, and comfort are qualities that we look for in choosing

fabrics. It should be remembered that these qualities are not always of equal importance in all our selections. For example, serviceability is of first importance in choosing a fabric for a gymnasium suit, and beauty and softness of texture are given less thought. In the choice of fabric for your spring party dress, appearance is by far the most important quality. If the texture and color are becoming, you will be little concerned whether the fabric is durable. After all, the dress may not be worn more than a dozen times. We should also recognize that each of these qualities is relative; that is, what we count good appearance in a wool tweed for a school coat is quite different from good appearance in linen for your best handkerchiefs. Likewise, the quality of comfort that relates to the wool tweed for a winter coat is quite different from the comfort that relates to the soft texture of the rayon knit fabric of which your underwear is made.

Another angle of the problem of choosing textile fabrics arises in the fact that the qualities desired in fabrics may be found in materials made from all the common textile fibers. It is sometimes thought that warmth may be had only from woolen fabrics or that cool fabrics are always thin cotton. This is not the case. Cotton knit sweat shirts have been found to be warm for winter wear. Another example to disprove this belief is that beautiful coat fabrics, made of a blend of fibers only part of which is wool, are now to be had. These are undoubtedly warm and promise good service. We may expect other new materials that will provide the qualities we desire most.

Each fiber may be made into fabric that offers good appearance, is durable, and is comfortable. But each fiber produces a fabric that possesses these qualities in its own characteristic way, and it will take further study of textile selection to enable you to choose well.

Recognizing the demands that you will make on the fabric is one of the first things that will help you in choosing wisely. Are you expecting strength, durability, and firmness in the fabric that you buy? Or will a loosely constructed, even a stretchy fabric, serve your purpose? In buying an afternoon dress for summer, for instance, the loose weave of voile serves the purpose admirably. A firm, cotton print has just the qualities that you do not want. The latter material will probably withstand greater strain; but even if it sold for the same price as voile, you would not choose it because a loosely woven, soft fabric is cool and easily washed.

The same may be said for rayon crepe—the purpose served governs the choice. The demands made upon such a fabric are quite different

if it is to be used to line a coat than if it is to be used to make a scarf that will be loosely knotted inside the neck of your coat. To be satisfactory, a fabric to be used as a coat lining must show no "slippage," it must withstand friction, and the dye must be fast to crocking, especially if it is in a dark color. In selecting the scarf, it is often relatively unimportant whether the yarns show "slippage." The fabric is required to withstand little or no friction and, as to color, the most important thing to consider is that it blends with that of the coat and hat.

Experienced buyers do not always demand the highest grade even when their budgets permit the higher expenditures. They are much more likely to fit their choice to the purpose to be served by the fabric.

If you would know whether a fabric under consideration is satisfactory for your purpose, you should list what service you expect of this garment; then ask the salesperson whether the material will give you the service desired. Ideally, this information should be stated on the attached label, but as yet few fabrics are to be had for which there are specific statements as to performance. If you were buying navy blue rayon crepe for a slip, such a list of requirements as the one following might be made:

- Fabric that does not ravel
- Fabric that does not fade or shrink in washing
- Fabric that irons easily
- Color that does not rub off on other garments
- Fabric that shows no yarn slippage at seams
- Fabric that does not wrinkle excessively
- Fabric that is not unduly warm.

The use made of a fabric determines the amount of wear and tear it must withstand and the way in which it must be cleaned. A play suit or dress for active sportswear, for example, is made of a sturdy fabric. The lines of the garment are tailored, and the seams are strong. It is expected that the color will not fade readily in strong sunlight. Because of the wear given the garment, it must be laundered frequently. To be satisfactory, there must be little fading or shrinking in laundering. If it is a fabric that requires ironing, it must iron with a minimum amount of effort. What fabric shall one choose to meet these definite requirements? Cotton materials, such as chambray or gingham, have generally proved to be best because cotton withstands laundering with less indication of wear than other fibers. Cotton materials may be as sturdy as desired and are usually less expensive than other fibers.

Certain finishes must be given cotton if fabrics made from it meet our requirements. The fabric must be dyed so as to be colorfast and it must be fully shrunk. Besides it may be finished so as to be smooth and easily ironed and comparatively crease-resistant. More and more fabrics are coming onto the market that have been given a permanent stiffening that makes starching unnecessary. Do you see that a fabric must be made for a specific purpose and that we must be well informed as to the requirements made of it before we can select one intelligently?

Let us consider the choice of material for a baby's dress. It should be soft and smooth, thin, and probably white. What fabric shall we choose? Again we use a cotton fabric, but this time batiste. Finer yarns will be used to make batiste, and the fiber will probably be mercerized to give it a smooth, silky finish. This delicate fabric must withstand many launderings without losing its original appearance, but the matter of colorfastness need not be considered. Shrinkage is also of less importance because a baby's garment is never made to fit so closely that a little shrinkage will interfere with the usefulness of the garment.

Another choice of fabric which you might make is black velveteen for your Sunday best dress. Did you know that velveteen is made entirely of cotton? How different it is from the other fabrics named. In deciding upon black velveteen, you have chosen it because it is rich and smooth in texture, jet black, and has the body and thickness that you desire for a warm winter dress. This fabric must be dyed so that its color will not rub off; it should be finished so that it resists spotting and crushing; and it must be firmly woven and sheared so smoothly that frequent brushing will not produce unevenness in the nap. The dress you wear for parties will not have to be cleaned so often as a play suit; and because velveteen does not launder well, it will be kept in good condition by frequent brushings and dry cleaning.

We might consider each of the common textile fibers as we have cotton. It would be possible to name materials made of each fiber that are intended for utility, that are dainty, or that are more or less luxurious. In each case, the way the cloth is made and the finishes used to develop its characteristic qualities determine its usefulness. Such qualities as permanence of finish, colorfastness, or ability to withstand laundering and cleaning without shrinking may be more or less common to all. These qualities, however, cannot be recognized by merely looking at the materials or handling them. Labels stating truthfully what may be expected of each fabric—whether made of cotton, rayon, wool, or silk—

are necessary to guide the buyer, whether she is experienced or is making her first purchase of fabric.

SUGGESTIONS TO THE CLASS

1. Make a list of the qualities desired in a fabric for a rayon crepe afternoon dress. What questions will you ask the salesperson concerning the fabric before you make a purchase? What qualities can you recognize by inspecting the material?

2. List the qualities desired in fabric for a sports shirt; for pajamas.

3. Compare a fine linen handkerchief with one of a similar weight made of cotton. Note the number of threads per inch in each fabric. How do the two materials differ in appearance? Crush each in your hand. What difference do you note?

4. Prepare an informative label (National Consumer-Retailer Council) for a wool crepe fabric; for handkerchief linen; for denim.

3. *How does construction affect the desirability of a fabric?*

The usefulness of a fabric is dependent upon the way it is constructed. The pliability of material, whether it stretches out of shape, whether it becomes rough, or whether it shows slippage with wear are all largely dependent upon the construction process.

Yarn construction. Let us first consider the yarns of which most fabrics are made. Yarns may be simple, alike throughout, or they may be complex, presenting variation in the fibers combined, in the twist used, or in such added features as knots or irregularities. Suppose you take pieces of plain gingham, dimity, cotton serge, and ratiné and ravel out the yarns, carefully putting the ravelings in a pile by the sample. Then with a hand microscope study the character of the yarns in each. The relations of the yarn used to the fabric produced will become so real that there will be no further question in your mind.

Simple yarns are the type most commonly used. They may consist of one strand or multiple strands twisted into a continuous yarn, alike throughout the entire length. Complex yarns are often used in novelty fabrics to produce a rough or unusual texture. They are usually multiple strand or ply yarns that present differences either in the material of which the yarns are made or in the manner in which the strands are twisted together.

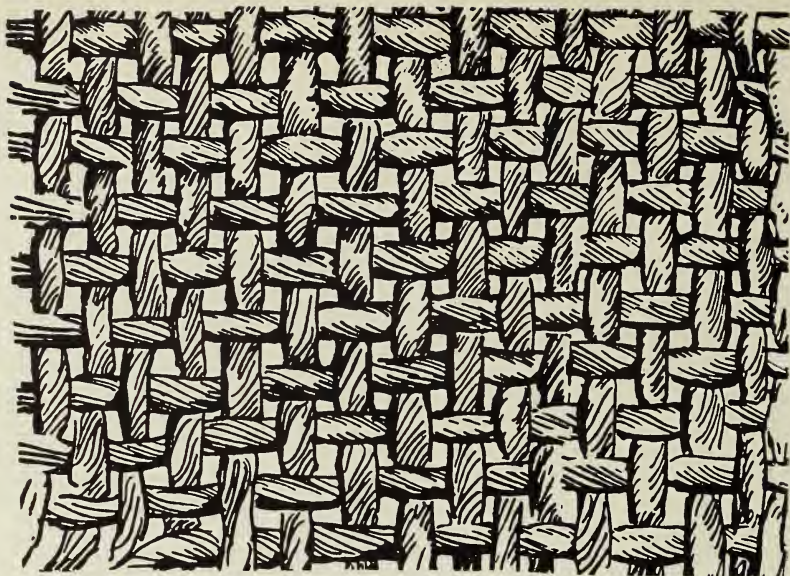


Simple yarns of various types.

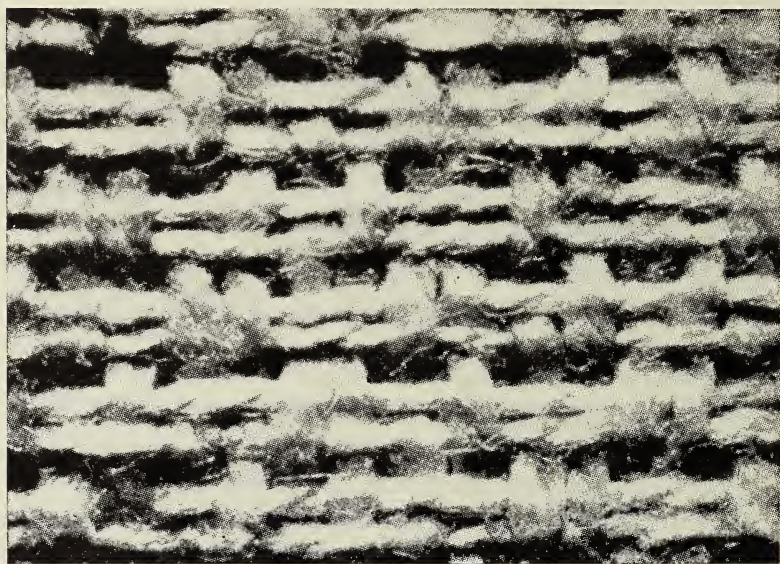
Fabric construction. You probably know that most materials are woven or knitted. Let us consider how these common methods of fabric construction affect the desirability as a fabric. In general, woven fabrics are firmer than knitted ones, although it is possible to make knitted fabrics so that they stretch or sag little if any.

Woven fabrics. Most of the fabrics used for clothing and household purposes are woven, that is, at least two sets of yarns are interlaced at right angles to create the cloth.

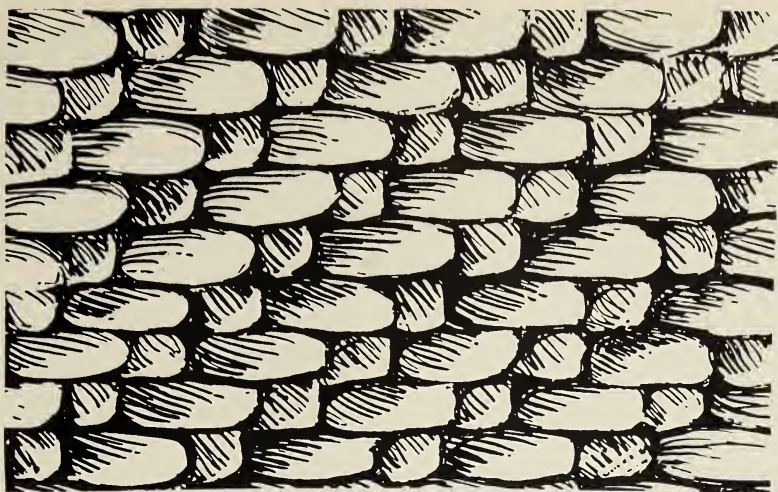
Plain weave is used, for example, in darning hose. The interlacing is plain, over and under each yarn. This weave produces no right or wrong side in the fabric by the construction process. Among the common fabrics of plain weave are muslin, gingham, toweling, and taffeta. Fabric design is produced in some of these by the combination of colors in the yarns used in the interlacing, familiar to all in checked ginghams. Fabric design is also made by grouping yarns that are of different sizes or that are different in type because of differences in their spinning. The use of yarns of different sizes and of different fibers lessens the durability of the fabric because the balance between the two sets of yarns used in the weaving has been destroyed.



Plain weave in an "over and under" interlacing of warp and filling threads.



Basket weaving is an interesting variation of the plain weave.



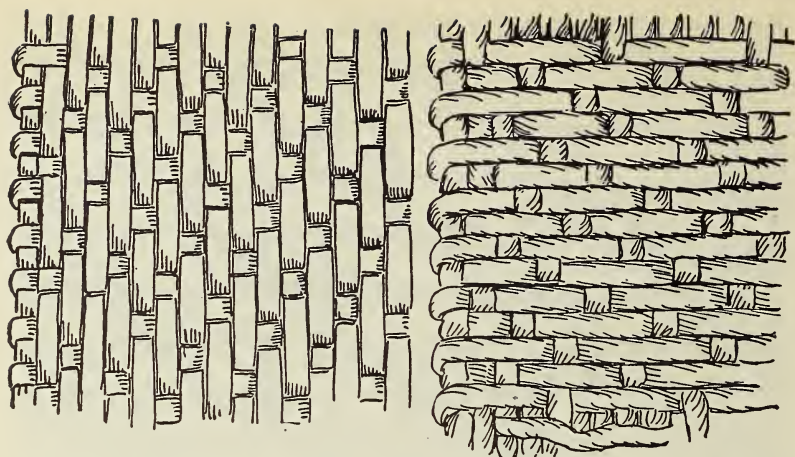
Twill weave is attractive and produces a durable fabric.

Basket weaving is a variation of the plain weave. In it two or more yarns are treated as one yarn in the making of a plain weave.

Twill weave is produced by the interlacing of warp and filling yarns so that diagonal lines are formed in the fabric. The slant of the diagonal lines depends upon the number of yarns the filling passes over and under. The twill weave is beautiful, firm, and strong. Fabric so woven is hard to tear or rip. A number of interesting fabrics are produced by variations of the twill weave. One of the most popular of these is the herringbone twill.

Satin weave is the result of the interlacing of warp and filling yarns in such a way that long floats or lengths of the warp threads are thrown to the surface, producing a characteristic smooth, lustrous fabric. Because of the length of the unbound yarns or floats, they are readily roughed or broken. Satin is not a durable fabric and should not be chosen when wear is of primary importance. Sateen is not unlike satin. In its weaving the filling threads are thrown to the surface in floats. Plain, twill, and satin are designated as the fundamental weaves.

Gauze weave is a method of construction in which usually a double set of warp yarns is used. These yarns are made to cross over each other, and are held in place by the interlacing of the filling yarns. This procedure prevents the filling or the warp threads from lying close to each other, and gives the characteristic openness that we desire in fabrics of this weave. By this method of construction, woven goods may be made to simulate knitted goods.

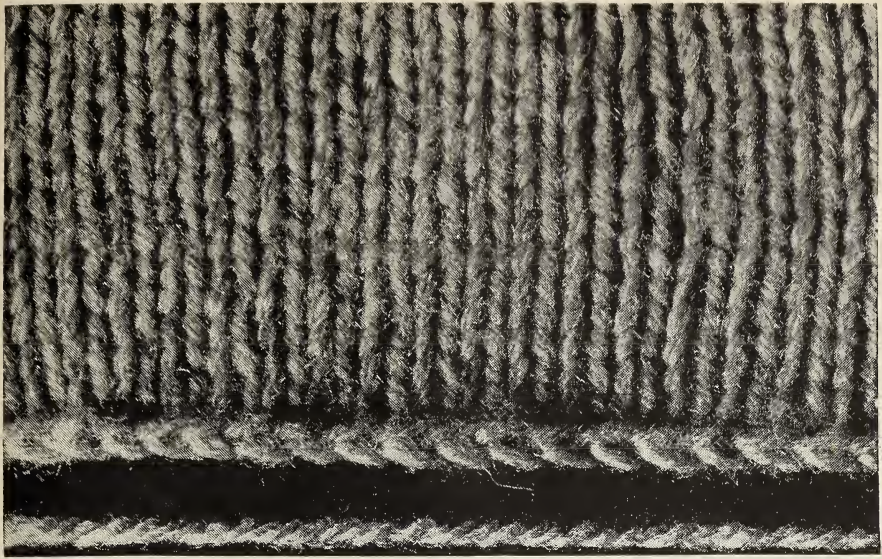


Satin weave has a characteristic sheen resulting from the long, lustrous floats on its surface.

Pile weave is a method of fabric construction in which an extra set of yarns is introduced in such a manner that short ends or loops are formed that stand upright on the surface of the finished cloth. This extra set of yarns may be warp or filling and is introduced by several different methods, depending upon the fabric. Corduroy is an example of a cotton fabric in which an extra set of filling yarns is introduced in the form of floats that make ribs running lengthwise of the fabric. Velveteens are made with an extra set of filling yarns which serve as floats but are not so constructed as to form ridges. In the finishing, these floats are cut and brushed to form the characteristic pile. Velvets may be made as double cloth—that is, two fabrics are woven at the same time, and are held together by an extra set of warp yarns. These are later cut apart, and the interlacing yarns produce a pile on the surface of both fabrics. Terry fabrics differ from all other pile fabrics in that both surfaces are covered with uncut loops. The durability of pile fabrics made by any method is dependent upon the security with which the pile is held in the body of the fabric.

The gauze weave and the pile weave are among those which are less common but of interest.

One should be able to recognize the weaves in samples of fabrics and, from the subject matter just presented, be able in a measure to judge their desirability for specific uses. Looseness of weave may mean high shrinkage; unbalanced weave means poor wearing quality; and slippage of the yarns, determined by stretching the fabric over the thumbs, may result in pulling at the seams.



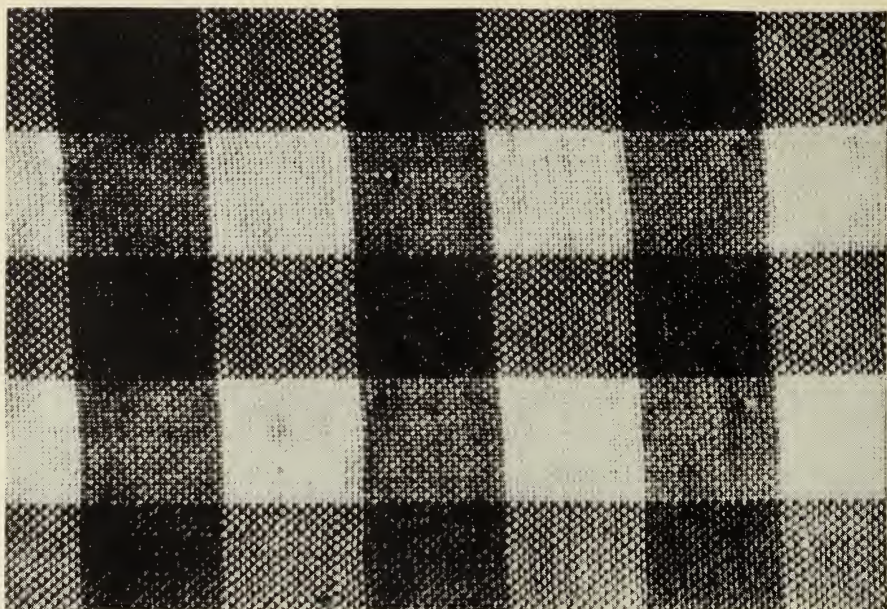
This is wool-knit fabric viewed from the right side. Note the thickness of the yarn from which the fabric is made.

Knitting. Knitting is a method of fabric construction that has gained importance in the past few years. Many undergarments that formerly were made of woven fabrics are now made of knit; sports costumes of knit construction have proved to be serviceable and comfortable and are therefore popular; knit fabrics that belie their construction are now made up into coats for men as well as women. In general, knit fabrics can be classified as warp knit and weft knit. The latter is well illustrated in hosiery, some undergarment fabrics, and all hand-knit articles. Warp-knit fabrics have the characteristic of being nonrun. An example of such fabrics will be found in some gloves, milanese knit undergarments, and knit coating fabrics.

Felting and braiding. Other methods of fabric construction far less common than weaving and knitting are felting and braiding. The appearance of felt is well known, as it is commonly used in the making of hats. Braiding is the method used for the construction of trimmings, belts, and shoelaces.

SUGGESTIONS TO THE CLASS

1. Bring to class pieces of material representative of each of the five common fibers that show plain weave; twill weave; satin weave.
2. From the department scrap box select samples of gauze weave; pile weave; felt; braided material.



Checked gingham is an example of simple structural design.

3. Bring to class examples of undergarments made from a nonrun knitted fabric.

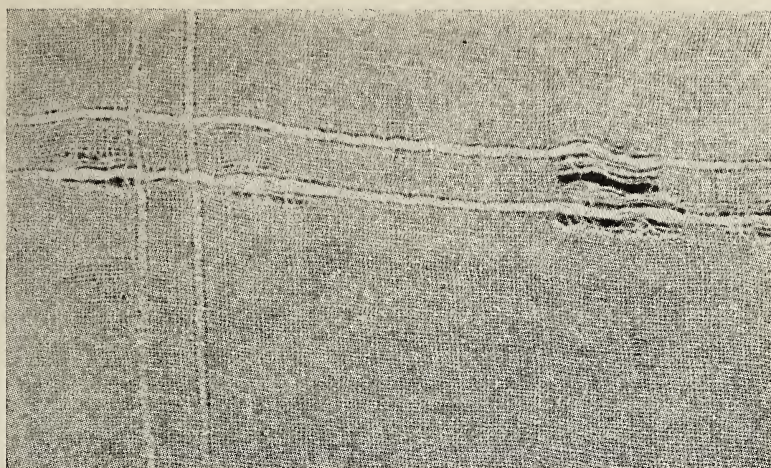
4. Obtain samples of fabrics that present as wide a variation in texture as possible, and ravel out the yarns. Is the variety of texture due to variations in yarn structure? What influence does the type of weave exert?

4. How do design and the finish affect the serviceability of the fabric?

After consideration has been given to the construction of the fabric, there yet remains the need for recognizing that the way the yarn is made, the way in which pattern or design is produced, and the finish given to the fabric will affect the serviceability of the material.

Woven design. Design may be produced in the weaving by the use of similar yarns of two or more colors. Just two colors give a possibility of wide variety in design. The two colors may be evenly spaced in checks of equal width, or one color may be used in only a half, a fourth, or a tenth of the number of yarns represented by the other color. The checks may be wide or narrow, square, or evidently rectangular.

Design may be produced by groupings of yarns, by variation in

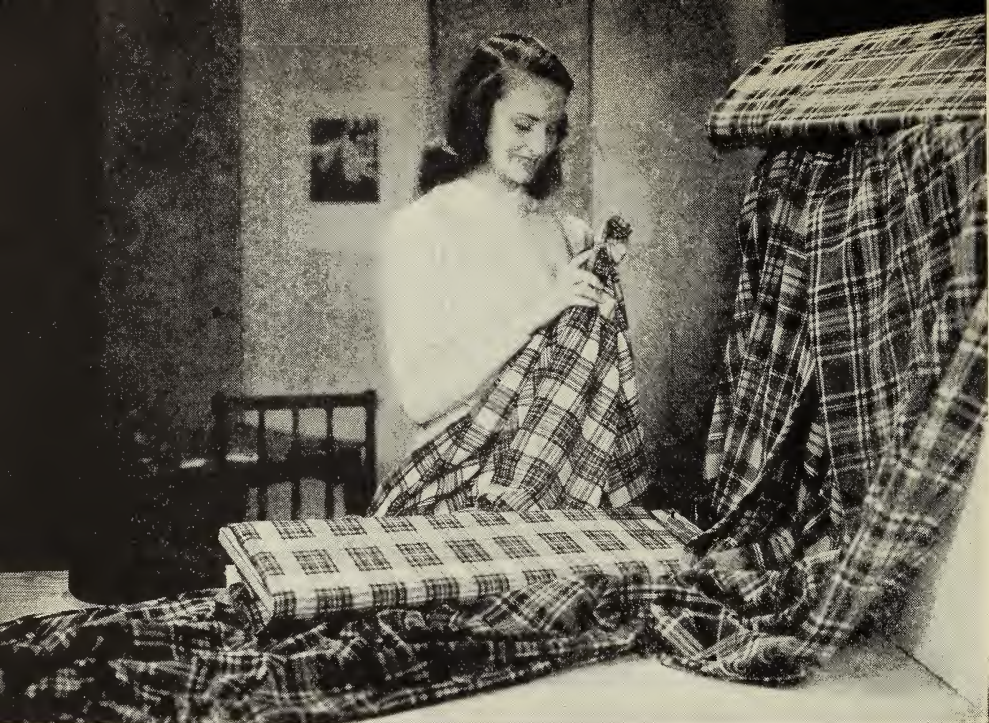


Differences in yarn size may lead to a breaking of the fabric on the line of the larger threads.

size and ply of yarn, by combinations of weave, and by combinations of yarns made of different fibers.

A plain white dimity shows a design produced by introducing a heavier yarn or group of yarns. A checked gingham shows a design produced by combining yarns of two or more colors in the weaving. Such designs as dots and figures are commonly produced by variations in the weaving processes. Sometimes a fabric of plain weave has had extra yarns introduced that are woven in at points to produce a pattern, as the dot in dotted swiss. If the float yarns are clipped without being secured, the design may be washed out or rubbed out in use. If the figure is introduced by what is known as swivel weaving, the dot or figure is well secured and seems to resist wear.

Besides considering the artistic value of a structural design in a fabric, one should give thought to it in terms of its effect on the fabric. Does it destroy the balance between the warp and filling threads? Does it present such great differences in yarn size that the fabrics will tend to cut or break on the lines of the large threads? Are there differences in yarn strength due to the effect of dye being used on some yarns and not on others that will lead to breaks in certain parts? Are there long floats that will soon break? Will the combination of fibers, if two or more are used, present a problem in the cleaning and care of the garment or article? Here are some of the points to be turned over in your mind as you choose a fabric with a structural design. Structural design produced in the weaving is not the only way of securing design in fabric.



Cohama Fabrics

Plaids such as these are examples of woven design.

Dyeing and printing. Much of the gaily flowered and dark and light fabric on the market has had its design produced by the processes of dyeing or printing, or both. In dyeing, the material is soaked in a dye solution; in printing, the dye is a part of a paste that is stamped on the piece by a large machine. Discharge printing, a combination of dyeing and printing, is commonly used on cotton and wash silk fabric. The dyed fabric is printed with a pattern by applying a paste in which there are chemicals that bleach out the color of the dye. If the bleaching chemical is overstrong, or the process carelessly or unwisely done, not only will the color producing the pattern fade, but before long the fabric of the pattern will drop out, leaving holes. The illustration on page 213 is a very good example of the effect of strong chemicals on a fabric. Sometimes paste, glass, asbestos, or other substance is applied as a surface design by stamping. In general, designs so applied are found to give shorter service than designs woven into the fabric.

The effect of the dye in producing fastness of color can be determined by exposing a sample of fabric, part of which is protected by cardboard, to the sun's rays for a week or more. Usually if the color is not fast, marked differences between the exposed and the protected parts will



Discharge printing may remove more than color from the fabric.

appear within that period of time. The effect of laundering on a sample also offers fair indication of the degree of fastness. Weakness resulting from discharge of color sometimes shows up if the sample is rubbed vigorously and pulled over the thumb. The design produced by paste dots may sometimes be rubbed off, indicating the brief satisfaction that could be expected of a garment made from the fabric.

The tendency of the fabric to spot may also be tested by dropping water on the samples. The way in which the pile is held in a pile-weave fabric and the permanence of the nap can be determined by careful examination that will tell part, if not all, of the story of its serviceability.

Fabric finishes. There are a number of finishes that have long been used to improve the appearance of fabrics and to make them more useful. All fabrics, for example, are pressed in some way to remove wrinkles before they are offered for sale. Cottons have often been stiffened, even polished, to improve their appearance. Woolen materials have been brushed to produce a nap and to give to them the ability to hold the warmth of the body. Some cottons, such as outing flannel, have likewise been napped to produce the same quality of heat retention. We have taken for granted a number of these finishing processes and scarcely think of them in selecting yard goods.

Recently a number of new finishes have been introduced which have greatly improved the serviceability of some standard materials and have extended the use of the newer synthetic fibers. These finishes



The effect of laundering is often indicative of the serviceability of the fabric. Note the fading that took place in three or four launderings.

may be of a chemical nature or they may be only mechanical. Sanforizing or other similar processes of preshrinking materials are among the finishes that are of a mechanical nature.

Among the important chemical finishes are those that give a fabric permanent stiffness. Not all of those so labeled retain this finish after repeated laundering or dry-cleaning, but efforts are being made to improve them and we can expect that soon finishes will be used that provide permanent stiffness without changing the appearance of the material.

Crease-resistant finishes have also been developed and are used on cotton, linen, and rayon fabrics. They are especially important as a finish for spun rayon fabrics which are known to wrinkle badly. Some of these do not withstand repeated laundering or dry-cleaning, but improvement in their permanency is to be expected.

Moisture-repellent finishes are among the new fabric finishes. These are used to finish materials that are showerproof, such as those used for raincoats. They are also used to prevent spotting and staining from spilled liquids and to prevent staining from perspiration.

Chemical treatments are also being used to protect wool fabrics against moths and to protect cottons and linens against mildew. Still another treatment renders fabrics fireproof. Some of these finishes are not permanent and must be restored if the fabric is laundered or dry-cleaned.

Another finish that is of great importance in increasing the durability of fabrics is the one which prevents yarns slipping within the woven cloth and that lessens fraying.

None of these finishes are in such common use as to be found on all materials. Their use is increasing, however, but if you would make sure that a fabric possesses such desirable qualities as crease-resistance or water-repellence look for the label which states the use of the finish.

SUGGESTIONS TO THE CLASS

1. From the department scrap box select a sample of cloth in the weaving of which two colors of yarn have been used to produce a stripe; a plaid or a check.

2. Obtain two samples of material, one of which has had the design applied by the use of paste, the other in which the design has been produced by the removal of color.

3. Obtain a sample of material that shows an elaborate design produced by weaving together several colors of yarn.

5. How may the fabric be identified and its quality judged?

Present-day methods of finishing fabrics may so alter the natural characteristics of these fabrics that they no longer appear to have the properties of the untreated materials. Important as these new finishes are, there are many fabrics that are not so treated. For this reason it is desirable to be able to identify fabrics made of the common fibers and to be able to judge the quality of the better-known materials. The table on page 216 may serve to identify fabrics made from the various fibers.

Judging quality in cloth. The buyer of a fabric can make a beginning in her attempt to judge the quality of a fabric if she will examine the weave and the yarn and upon these points, base part of her decision as to the desirability of the cloth.

If the weave is good, it will be firm, even, and regular, free from thin or thick places, and uniform in strength. The most exact check as to firmness of the weave can be made by counting the threads in one inch of the cloth with a pick lens, determining the count for the warp and filling separately. There should be a good balance between the two sets of threads to insure durability. If one set of yarns is much more

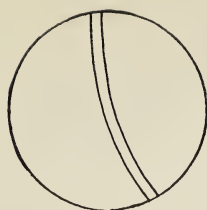
AIDS IN THE IDENTIFICATION OF FABRIC

	COTTON	LINEN	WOOL	SILK	RAYON
Appearance of fabric	Dull appearance unless mercerized.	Natural luster; may even appear silky.	Soft appearance, indistinct weave. Worsted are firm and somewhat harsh.	High luster, smooth.	Very high luster. May also be lusterless.
Feel of fabric	Soft, usually smooth; may be slightly fuzzy.	Cool, smooth, and crisp.	Warm and soft.	Cool and smooth.	Cool; usually feels somewhat heavier than silk.
Creasing of fabric	Creases easily but does not retain crease.	Creases readily and holds wrinkles.	Fairly crease-resistant.	Fairly crease-resistant.	Creases fairly easily.
Tearing of fabric	Tears easily with fairly dull sound.	Difficult to tear, and has a dull sound.	Tears with dull sound.	Tears with a shrill sound.	Tears with a rather shrill sound; edges remain straight.
Breaking of yarn	Breaks easily; ends appear fuzzy.	A thread snaps; ends appear pointed.	Torn ends appear curly.	Ends are smooth and straight.	Ends appear as small bundles of fine, smooth cylinders.
Length of fiber	$\frac{1}{2}$ to $1\frac{1}{2}$ inches.	Short fibers denote poor quality; long fibers, 5 to 20 inches, good quality.	Varies with quality of fabric, 1 to 10 inches.	Spun silk, short fibers; thrown silk, indefinite, up to the yardage of the fabric.	Made any length.
Microscopic appearance of fiber	Appears as a flat, twisted ribbon.	Straight cylinder; resembles jointed grass.	Longitudinal, scaly cylinder.	Longitudinal, smooth cylinder. Cross section, irregular.	Sometimes has bubbles on the surface; resembles a smooth wire.
Burning	Burns quickly, with odor of burning paper.	Burns with a yellow flame, light ash, odor of burning paper. Smolders after flame is extinguished.	Burns with crisp bubble ash, odor of burning feathers.	Pure silk burns with little odor, leaves crisp black bead. Weighted silk leaves the outline of the material.	Burns quickly, smolders after flame is extinguished, leaves gray ash. Cellulose acetate fuses as it burns, a glassy ball dropping from the burning fabric, or the edges curling.

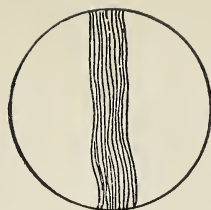
numerous than the other, or much stronger, the cloth will tend to break on the line of the fewer or weaker yarns. The hand magnifying glass will show whether or not the yarns are clear, round, and even, or rough flattened. However, few people can go to such trouble, and the majority prefer to depend on accurate labeling for details of fabric analysis. If the buyer wishes to carry her tests further she may have the fibers from the yarns examined microscopically to learn the identity of the fiber.

Fastness of color. The fastness of color of a fabric, whether plain dyed and unpatterned or one on which a design has been produced, is of great importance to the satisfaction that may be had from the fabric. A garment of faded or dingy hue is often discarded long before it has rendered the full service which its other characteristics might make possible. It has been stated that there is no dye really satisfactory under all conditions.

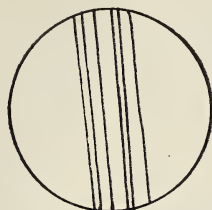
For example, a dye may be sunfast, but not perspiration-fast; it may be laundry-fast, but not sunfast. However, there are some colored fabrics which withstand rigorous tests for fading. A wise basis for choice should include labels bearing information concerning the fastness of the dye. The statements on these labels should, in addition, be verified through home testing of a sample.



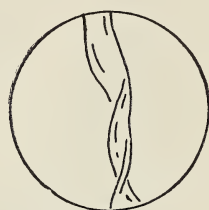
SILK



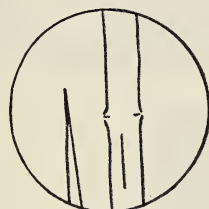
WILD SILK



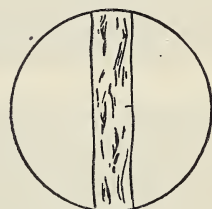
RAYON (VISCOSE)



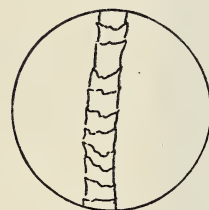
COTTON



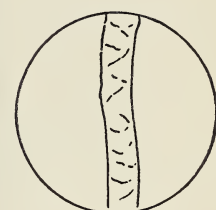
LINEN



RAMIE

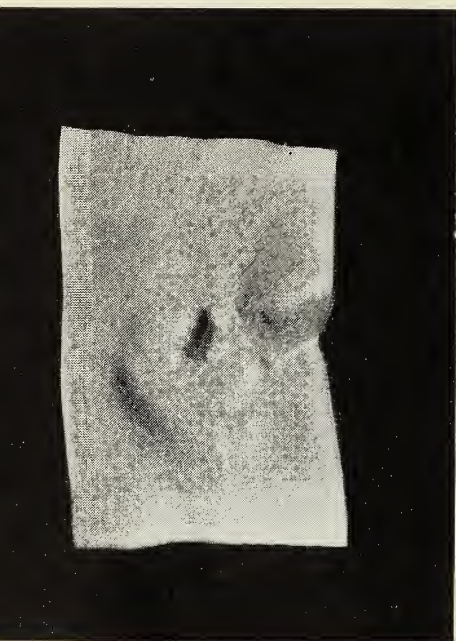
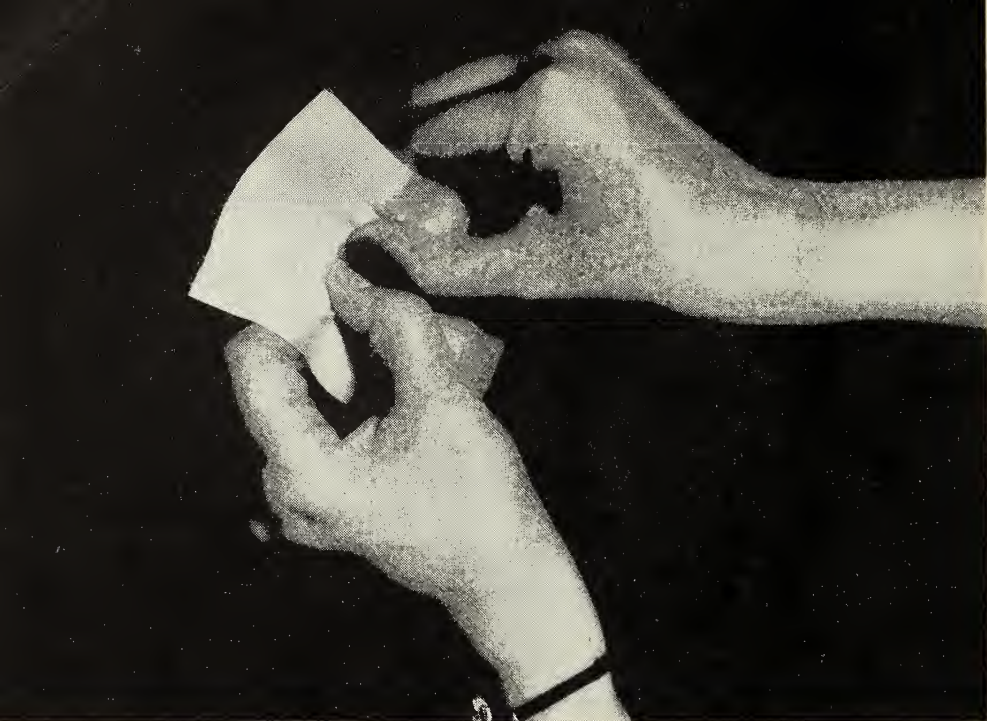


WOOL



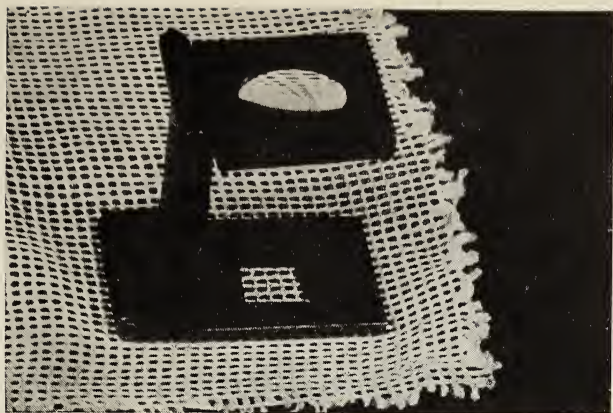
MOHAIR

A comparison of the microscopic appearance of fibers used in fabric construction is of interest.



Top: Stretching the fabric over the thumbs may cause the yarns to separate. *Left:* Fabrics which show such slippage do not withstand much strain in wear.

Testing for serviceability of cotton cloth. A few simple tests that may be used to judge the serviceability of cotton fabrics include those for determining colorfastness, amount of shrinkage, presence of sizing, and the number of



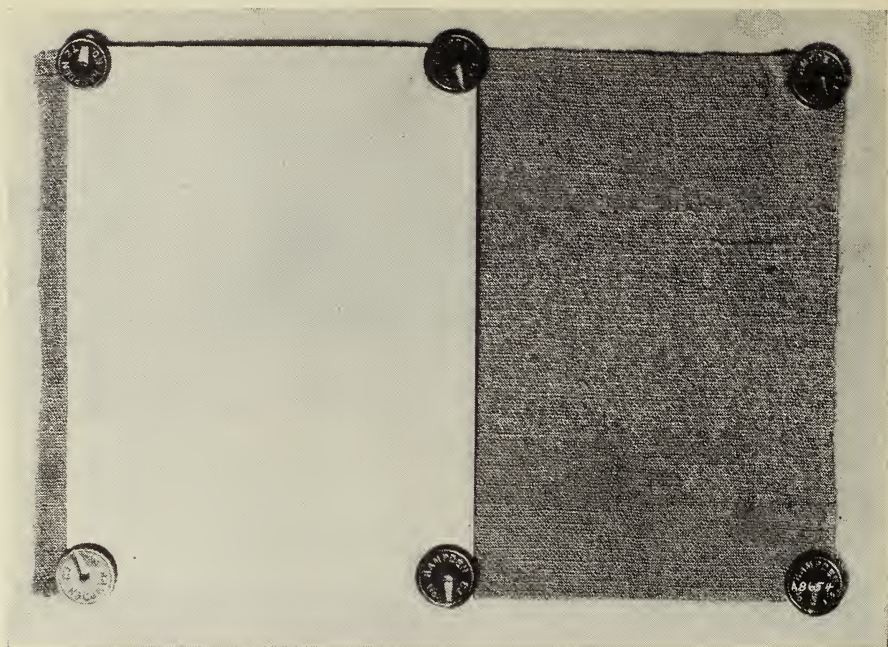
A pick lens. Used to determine the count of the warp and filling thread.

yarns both warpwise and fillingwise in an inch of fabric. To test for colorfastness when exposed to sunlight, thumbtack a sample of material about 3 x 6 inches to a board, and cover half of the sample with a piece of cardboard to protect it from the light. Place the board in the direct sunlight for the six brightest hours of the day on four sunny days; then remove the cardboard and examine the sample for fading.

In a test for colorfastness in laundry, a sample of colored material may be sewn to a strip of white cloth and the two materials washed, alone or with other colored clothes, with soap commonly used for laundry purposes. A discoloration of the white cloth may mean that the colored sample has faded or that other colored garments have faded. Wash a piece of the fabric with mild soap and lukewarm water to learn whether the fading has been caused by harsh soaps and incorrect handling.

The finishing of cotton cloth should yield a fabric free of fuzz, properly bleached and completely preshrunk, having pleasing smoothness and luster without excessive sizing. Sizing is the starchlike substance added to the cloth to give weight, stiffness, and glossy sheen. If sizing can be freed by crumpling and rubbing the cloth in the hand, the fabric is regarded as oversized, and probably as being loosely woven and sleazy. Mercerization is sometimes used to secure, by chemical means, a permanent luster on cotton fabrics. Cotton fabrics with the high sheen produced by mercerization are popular for sleeping garments and for some underwear, as well as for outer wear.

To test for the presence of sizing, one may rub the fabric between the hands, carefully noting whether any powdery substance is freed

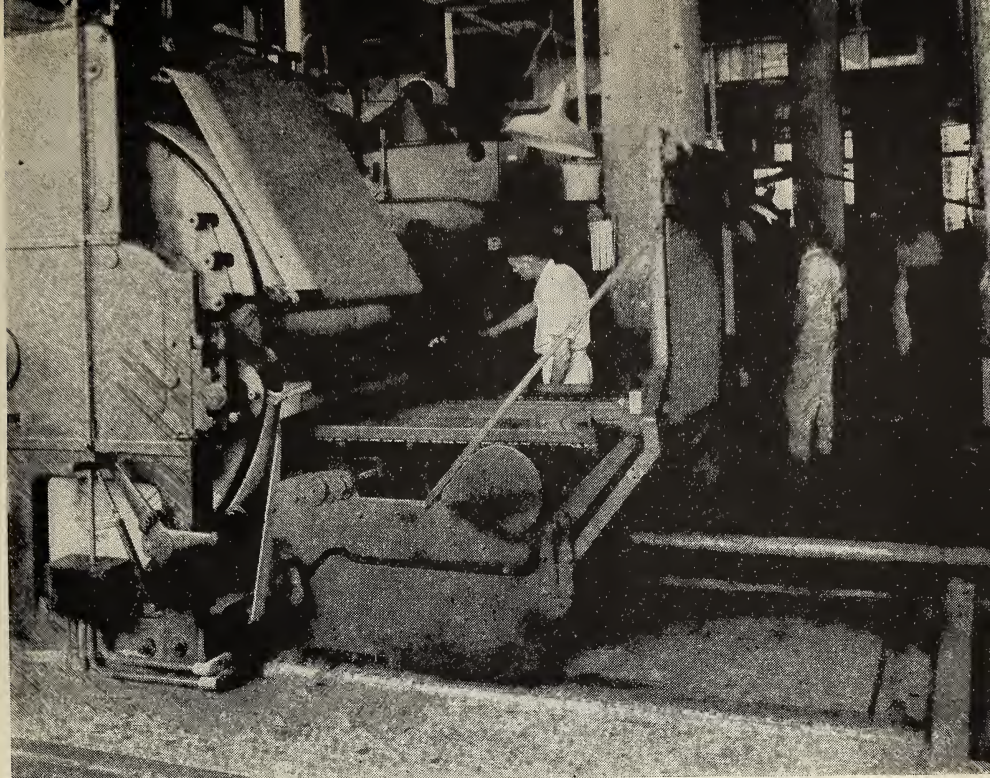


A sample of fabric prepared for the sun-fading test. Cardboard covers part of the sample.

from the cloth. Samples that are known to contain sizing may be thoroughly washed in soap and water, dried, and pressed, and then compared with the original material. The washed fabrics will appear to be much lighter in weight, may appear sleazy, and often show marked shrinkage. Perhaps one of the greatest difficulties in the use of cotton fabrics in the past has been the varying amount of shrinkage that might occur. Preshrinking at home has never been popular, and the possibility of accurate allowance for shrinkage in the cutting of garments is slight.

Today certain processes are being employed in the mills to insure the full shrinkage of the fabric in the finishing. The purchaser should assure herself that fabrics have been so treated. Many materials bear the label "preshrunk," but this label does not guarantee that they may not shrink further. Only when fabrics or garments bear labels fully guaranteeing that materials will not shrink further or that shrinkage is limited to a half or a quarter inch per yard, may the purchaser know that she has selected wisely.

Identification of linen. Points in the identification of linen that should be recalled are these:



Byron C. Moon Co.

This is a method of preshrinking fabrics.

1. Linen has a natural luster, but many times has the appearance of unevenness on the surface.
2. Linen fabric has a smooth, crisp, and cool feel.
3. When linen is torn, the sound is dull as compared with that when cotton is torn.
4. Most linen fabrics crush easily.
5. Linen burns with a yellow flame, and the ash left is very light. The odor is similar to that of burning paper.
6. Linen absorbs moisture very quickly. Ink is often used for this test.
7. Linen fibers may vary in length from one-half foot to three feet.

The identification of a fabric as wholly linen brings the modern girl only part of the information she desires. The ease with which linen crushes and wrinkles has led to a demand that the process of manufacturing include treatment of the fabric that will lessen its "creaseability" and assure the buyer that the material is fully preshrunk. Colorfastness and even distribution of color are further points on which

the buyer of linen wishes assurance. The trend of the times is toward the development of linen of increased serviceability.

Some of the characteristics by which a linen fabric is known are now being duplicated in fabrics made of cotton and rayon fibers. The yarns of linen dress fabrics usually show some unevenness in diameter. This is responsible for the rough texture that is associated with dress linen. The same texture may be had when the fabric is made of cotton or rayon if the yarns are similarly spun. Fabric finishes like those used on linens are also employed to add further to the similarity between the appearance of linen-like materials and those made of linen fiber. Beetling, which is a special finish for linen, flattens the yarns and produces a leather-like texture. This finish is also used on fabrics of cotton or rayon to add a linen-like appearance.

Tests for wool fabrics. Certain tests have been found to give the present-day buyer a fair basis for the identification of those fibers present in fabrics which are offered in the market as wool yardage. There are some common tests which may be used to help one recognize wool fabrics. Although they were given previously, let us review them here. The tests used as aids for the identification of wool are as follows:

1. In appearance one can note that the weave in wool fabrics is indistinct.
2. Wool burns with the odor of burning feathers, and leaves a residue in the form of a bubbly ash.
3. When touched, wool feels warm and soft.
4. When the fibers are broken, the ends of wool are found to be curly.
5. The yarns found in worsted are firm and hard. The fabric shows a distinct weave.
6. Microscopically, wool fibers appear as scaly cylinders.

Wool fabrics vary, as do cotton and linen ones, with the size and character of the yarns used in their construction. Fine yarns are used for the fine, sheer fabrics. It is important that a balance exist between the warp and filling yarns in any weave. If this is lacking, the durability of the cloth is greatly lessened. The yarn is larger in such fabrics as blankets than it is in wool sheers.

Fabrics made from the finest quality of wool fibers were for years considered the only material suitable for certain types of garments, such as suits and coats. The characteristic which permitted wool fabrics to be shaped and undesired fullness to be removed by shrinking is possessed by other fabrics only in a limited degree. However, conditions

may exist which prevent the production of wool fabrics at a price which permits their wide use. Great care must be used in the selection of fabrics from the assortment made of wool and rayon, or wool and cotton, or all rayon if satisfactory service is to be had from them. One must choose a fabric with sufficient body and close weave to give the desired firm appearance. Fabrics that ravel or fray badly should be avoided. Such material is difficult to handle and requires time-consuming seam finishes. Finishing methods have been developed which make the identification of fibers used a task for experts. This leads to consumer demand for informative labeling that will afford reliable information concerning fiber content.

Tests for identification of silk. The relatively high price of silk has led to its adulteration. The most common adulteration is weighting; next is the substitution of a highly mercerized cotton fiber or a rayon fiber for all or part of the supposed silk content. Although truthful labeling of the fiber content of fabrics is increasing, it is as yet far from universal. Familiarity with a few simple tests will serve as an aid in the identification of silk fabrics. The commonly accepted tests are these:

Appearance and feel. Silk fabrics are smooth and lustrous.

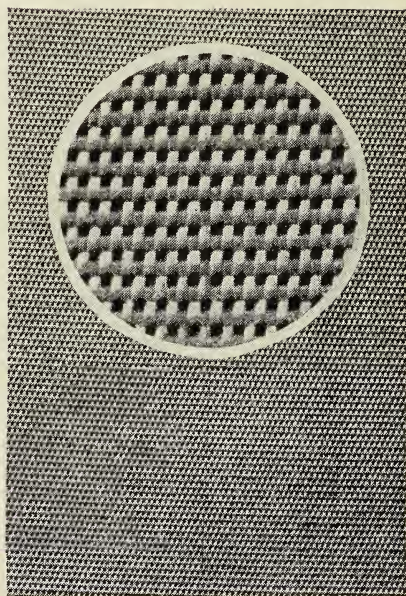
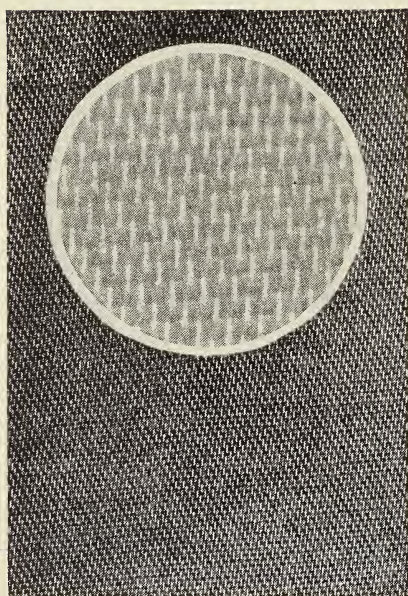
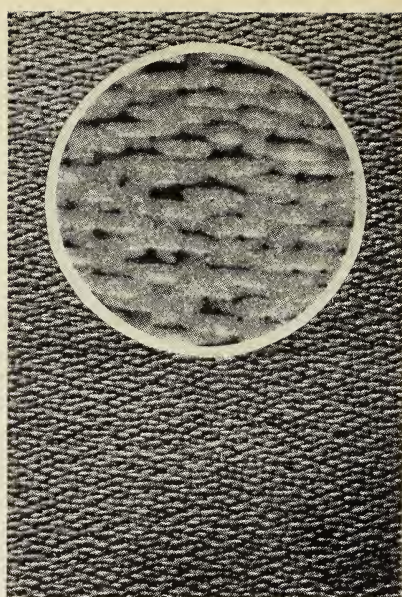
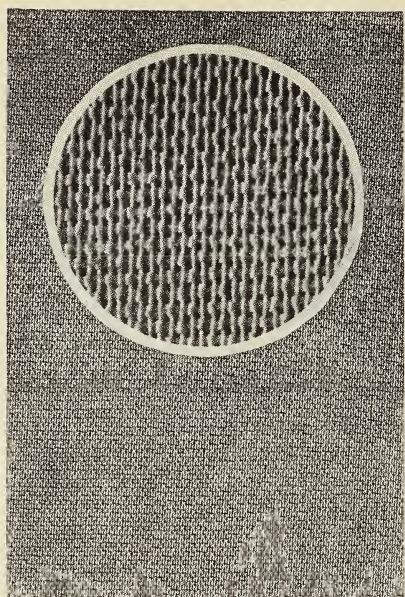
Tearing and breaking. Silk tears with a shrill sharp sound, the yarns breaking at uneven lengths, creating an irregular edge. The separate yarns, if examined, will show smooth and straight ends.

Burning. Pure silk burns rapidly, with almost no odor, curling into a crisp, black ash ball. Weighted silk burns smolderingly and slowly, leaving an ash the shape of the original sample, indicating the heavy metallic weighting.

Microscopic. Longitudinally the silk fiber appears as a smooth, straight, hollow cylinder; in cross section it appears triangular.

Identification of rayon fabrics. Rayon has been modified in so many ways that it is difficult at times to recognize it. Some rayon is highly lustrous, so lustrous in fact that people have disliked this quality believing it to appear gaudy and cheap. Since rayon is man-made, its producers have for some uses changed this quality of high luster to a dull, flat appearing finish.

As rayon is produced, it is usually a long, continuous filament. In order to use rayon to make cloth that looks like cotton and like wool, the long fibers are either cut in short lengths or are manufactured directly in this form and then are spun. The short lengths of rayon fiber may even be given a permanent crimp so that the cloth made from them has the texture of wool.



Fabrics made from continuous filament rayon. *Top left:* Cuprammonium rayon. *Top right:* Acetate granite cloth. *Bottom left:* Acetate satin. *Bottom right:* Viscose taffeta.

In general, rayon fibers are weak when wet so that great care must be taken in washing rayon fabrics to prevent breaks in the cloth. Strong soaps or other alkalis also tend to weaken rayons. White rayons do not yellow in washing as does white silk. So if you have a white rayon blouse, it will remain white throughout its life without turning yellowish.

Some rayons are easily ironed or pressed because they withstand almost as much heat as does cotton without scorching. However fibers of cellulose acetate melt under the same heat. The fabric sticks to the iron or a hole may even be made by the use of too much heat.

Now shall we review the tests previously given as aids to the identification of rayon fibers? These tests follow:

Appearance and feel. Rayon fabrics may have very high luster or they may be lusterless. They usually feel heavier than silk.

Tearing and breaking. Rayon tears with a shrill sound, and the edges remain straight. The separate yarns, if examined, will appear as a small bundle of fine, smooth cylinders.

Burning. Cellulose acetate fuses as it burns, a glassy ball dropping from the burning fabric, or the edges curling. The other rayons burn quickly, leaving a gray ash.

Microscopic. The rayon fiber sometimes has bubbles on the surface, and it resembles a smooth wire.

SUGGESTIONS TO THE CLASS

1. Learn to recognize at least fifteen different cotton fabrics, five of linen and silk and ten of wool and rayon. Suggest a use for each fabric.
2. With the use of the microscope learn to identify the common textile fibers. Examine a few fibers from different materials. Can you recognize them?
3. Collect several samples of silk fabrics, and by the use of the test given in the text, test for the presence of other fibers, metallic weighting, and soluble weighting.
4. Compare rayon fabrics with similar fabrics made of silk. Are there characteristics that distinguish rayon from silk? In general, which fabric feels heavier? Which fabric crushes more readily? How do the prices compare?
5. In separate dishes burn a sample of each one of the five fibers, noting odor, residue, and flame of each.
6. Compare, by burning, samples of rayon fabrics. Are differences shown?
7. Wash a sample of cotton suiting and of linen material of similar weight and texture, and dry them. Repeat the process three or four times, iron each piece, and compare the appearance of the fabrics.

8. Obtain swatches of noncrushable dress linen and compare with the usual dress linens. Note the structure and twist of yarns in each.

6. What care should be given clothing?

The use to which clothing fabrics are put makes cleaning necessary if the full degree of satisfaction is to be realized from them. Some fabrics, because of the way in which they are made soil more easily than others. Fabrics that are soft in texture, particularly those with a napped surface, will gather soil more readily than those that are smooth and firm. Light-colored fabrics often show soil before those that are dark in color. Fabrics made of long, smooth fibers seem to shed soil whereas those made of short fibers appear to gather soil readily. The word soil as related to clothing means more than dust and sooty grime that may collect on clothing even as it hangs in one's closet. It includes perspiration and oil from the skin, cosmetics, food stains, grease, grass stains, ink and pencil marks, and stains of many other sorts. Garments must be maintained free of all these forms of soil if they are to give true satisfaction.

Caring for cotton fabrics. The degree of satisfaction the wearer obtains from a garment is dependent upon the possibility of maintaining the garment in a state of freshness with reasonable care. The method of cleaning commonly used to restore freshness to cotton fabrics is laundering, which is cleansing by dipping and rubbing in soapy water or in a solution of one of the newer soapless cleansers and water. Thorough rinsing should follow.

If the weave and the colorfastness of the dye are such that laundering is impractical, the life of garments made from it will be short. If the cut of the garment and the trimmings used on it are such as to make laundering impractical, the service to be anticipated is also greatly lessened. In order to give full satisfaction, a cotton garment must remain serviceable after laundering, its appearance, size, and shape remaining unchanged.

The maintenance of a garment in a serviceable condition by laundering is determined not only by the fabric and the garment but also by the laundering methods used. Poor methods always shorten the life of a garment; good methods always lengthen it. The importance of proper laundering methods cannot be overemphasized.

Laundering. The following are suggested as the steps in a desirable laundering procedure for cotton slips and dresses:

1. Sort the clothes, placing garments of one kind or color together.
2. Remove stains, and do any necessary repair work.
3. Soak the white clothes 10 to 15 minutes in warm water, but do not soak the colored clothes unless they are extremely soiled.
4. Dissolve a mild soap in hot water. This is essential for good laundering. Never rub soap directly on a colored garment, as this may cause fading.
5. Next, place the white clothes in the machine in hot soapsuds, and wash for 15 to 20 minutes. Wring them out of the suds.
6. Then place the white clothes in clear water for rinsing. Put the colored clothes into the machine after the suds have cooled considerably.
7. Rinse the white clothes through several rinse waters to remove all trace of soap and to keep them clear. The last water may or may not contain bluing.
8. Follow the same procedure for the colored clothes as used for the white ones.
9. Sort out any clothes that are to be starched, and put them through a starch solution which is well cooked and free from lumps.
10. If possible, dry the clothes out of doors, hung on strong, clean lines. The white clothes may be hung in the sunlight, but the colored ones should always be dried in the shade, as the bright sunlight may fade them.

An automatic washer alters the procedure somewhat, and complete directions for its use should be followed.

Ironing. In ironing, an attempt is made to give to the clothes a smooth, lustrous appearance which is free from wrinkles. The following suggestions outline good ironing procedure:

1. The clothes must be well dampened. To do this one may use the hand or a small hand whisk broom to sprinkle the water evenly over the article to be ironed. Then roll the clothes tightly and leave them for at least 4 to 5 hours. (Do not let colored garments lie over night.) Towels placed between the folds of the garment prevent discoloration through contact with parts that fade. Many cotton fabrics should be ironed on the wrong side. Colored garments should be ironed as soon after their laundering as possible, to prevent running of colors.
2. The ironing board should be smooth, well padded, and tightly covered with a piece of cotton cloth.
3. The iron should be clean.
4. In ironing it is best to iron first that part which is least likely to muss easily while the garment is being finished; then those parts which are most likely to wrinkle. Iron all parts as dry as possible.
5. When ironing colored clothes, be careful not to have the iron too hot, as heat will injure the color.

6. Garments should be placed on hangers, and permitted to hang until thoroughly dry.

Caring for linens. When the garment needs thorough cleaning, laundering will be found the best means of cleaning linen fabrics, with the exception of some few linen laces that may require dry cleaning. Garments made of linen, because of the way they are made sometimes are too difficult to iron after washing and are therefore dry cleaned. The procedure used in laundering linen garments is practically the same as that already given for laundering cotton fabrics, with a few exceptions. Linens should be wrung by hand to avoid the heavy creasing that would result from wringing them by machinery. Also, the resistance the flax fiber shows to dye and the lack of colorfastness in the pastel tints often used for linen make it necessary to use special care in drying linen fabrics. When washed, colored linens should always be dried in the shade, rather than in direct sunlight.

In preparing linen garments for ironing, it is well to fold them from the line while they are still slightly damp, to assure a smooth ironing surface. It is practically impossible to dampen dry linen so that it will iron smoothly. Even distribution of moisture is absolutely essential to an acceptable finish in the ironed garment. Linens should be ironed on the wrong side of the material. Colored linens should be ironed as soon after being laundered as possible, to prevent the colors running. The general procedure, with these exceptions, is the same as for cotton garments.

To give satisfaction to the wearer and to the observer, linen apparel should be kept crisply fresh and free from wrinkles and from "wiltedness." This means pressing the garment each time it is worn. The new process by which a so-called "non-crushable" linen is made has greatly lessened the laborious care that linens require. Even with this new processing, however, frequent sponging and pressing is necessary to keep the fabric in a well-cared-for condition. Some of the synthetic fabrics made to resemble linen are comparatively crease resistant. In pressing linen, the garment should be turned wrong side out and sponged lightly with a cloth dampened in clear water. The iron used in pressing should be only moderately hot, and the stroke of the iron should be with the warp threads of the fabric. A steam iron is often a most satisfactory piece of equipment for maintaining a linen garment between launderings.

Caring for woolen garments. Frequent airings help to maintain a wool dress in good condition. In some climates, wool fabrics mold un-

less airing is followed as a regular routine. In all climates, such fabrics must be aired frequently if they are to be kept fresh. Very often odors of cooking or of tobacco smoke affix themselves to near-by wool garments, and only by frequent and thorough airing can these garments be restored to the desired freshness.

Pressing. Have you ever seen a woman wearing a baggy, wrinkled suit, and commented or thought, "Her clothes surely need pressing"? The finish or appearance of any wool garment is dependent upon pressing. The wool fiber absorbs moisture from humid air, as well as from direct contact with a liquid. It tends to hold the moisture so acquired, and the lines of the fabric made from wool fibers change as the separate fibers comprising it become moisture laden. If the fabric is allowed to go without pressing, its surface will be uneven and rough, and the fit of the garment will be changed. Pressing, then, becomes necessary to restore the wool garment to its original lines and establish anew the sharp edges of pleats, hem, and other details.

Wool should be pressed from the wrong side, and the fabric should be protected with either a laundered cloth or a piece of unglazed paper. When it is necessary to remove wrinkles in the wool fabric, the cloth or paper is lightly dampened with a cloth or sponge dipped in clean water. The iron is applied to the dampened surface without undue pressure, the pressing proceeding with the yarn of the fabric, either the warp or filling. The iron should not remain in one place long enough to dry the material or to outline its own form, and should be moved in such a way that it merely touches the surface. Care should be taken to prevent scorching. The steam iron is ideal for pressing wool garments. The steps in the procedure for pressing the wool garment are the same as those given for cotton, the parts that will not become mused readily being pressed first.

Hanging. The garment should be carefully placed on a hanger when it is not in use if it is to be maintained in good condition. Even occasional pressing cannot undo the damage done to a wool garment by dropping it over the foot of the bed for the night, or carelessly tossing it over a chair. The slender wire hanger serves well for the dress that is being worn day after day, but for the garment worn occasionally a padded hanger, which prevents stretching of the shoulder-line, should be used. A dress bag that can be securely fastened either with snaps or a slide fastener provides protection from dust and dirt, and may even ward off the ravages of moths. Individual dress covers made of some lightweight fabric are often used to protect garments worn infre-

quently. When the garments are hung in a closet, there should be ample space between each to prevent crushing. Knit garments, which usually stretch excessively if hung on hangers, should be folded and placed in drawers or boxes provided for storage.

Spot removal. Since many wool garments do not receive the frequent complete cleaning commonly given to cottons and linens, the removal of spots from the garment may be found desirable as a means of wardrobe maintenance. In removing a spot one must first ascertain the type of substance which has caused it. When the source of a spot cannot be learned, the garment should be placed in the hands of a professional cleaner.

Good results cannot always be expected from home spotting, for if the garment has been worn enough to be generally soiled, the clean spot will be much in evidence. In addition, successful spotting requires a full knowledge of how each stain may be removed. Even so common a spot as one caused by milk must first be treated with water to remove the water soluble substances, and then with solvents that are effective in dissolving grease.

Grease solvents for use in spot removing may be either inflammable or noninflammable. The latter should be chosen for home use. To use such a solvent successfully, a blotter or soft cloth must be placed under the spot, and the solvent should be applied to the spot, working from the outside in. Application with a cloth like the fabric to be cleaned, or with a piece of velvet or other cloth of approximately the same color, will prevent the formation of a whitish spot that might result from rubbing.

Blanket wash. Some wool garments can be satisfactorily laundered. In such case, the use of a special soap preparation, commonly designated as "blanket wash," is recommended. To prepare it, dissolve one large bar of mild white soap in 3 quarts of hot water. When it is thoroughly dissolved and partly cooled, add one-half cup wood alcohol and 2 tablespoonfuls of borax. Use sufficient of this wash in the lukewarm water drawn for washing the garments to make a good suds.

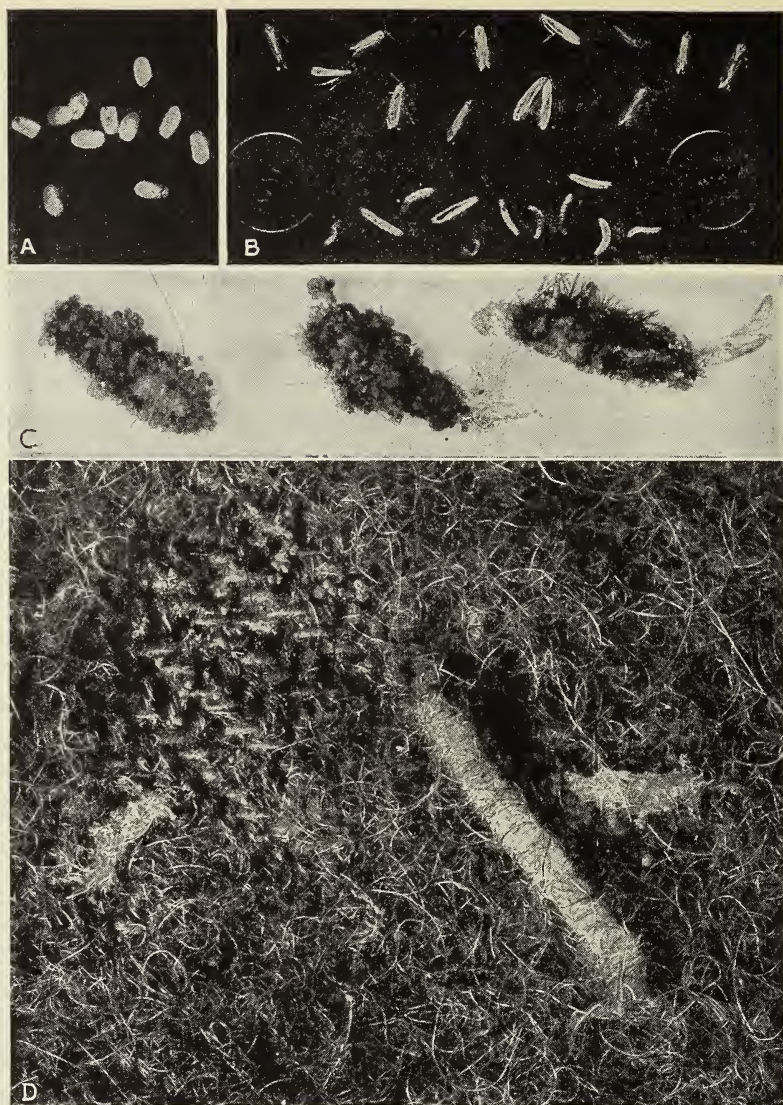
Before immersing the garment in the suds, see that the necessary measurements as to its size have been taken (See p. 234.) and that a sheet or series of towels have been prepared for drying it. Then place the garment in the suds and gently squeeze it again and again until all soil has been fully loosened and brought out into the suds. Next, squeeze it free of as much of the suds as is possible, and then put it through several rinse waters, squeezing the water out after each rinse. Never

wring the garment, as this will pull it out of shape. Finally, place it on the sheet or towels, being careful to observe the desired measurements. Pat and gently pull it to the exact shape desired. Then dry it slowly in the shade. A final finish may be given by pressing cuffs, plackets, and the like.

Dry cleaning. If the garment cannot be cleaned by laundering because of either the characteristics of the fabric or the details of the dress design, dry cleaning is the accepted method for the removal of soil. In dry cleaning, naphtha, benzol, carbon tetrachloride, chloroform, and ether are among the solvents used. These solvents do not affect the fibers in any way, and such design details as ruffles, pleats, and draping remain unchanged despite being saturated in them. Soaps are made soluble in these solvents and are effective for use with them, since they greatly facilitate the thoroughness of the dry-cleaning process. As far as is yet known, dry cleaning has no injurious effect on wool and silk fabrics.

We have discussed spot removal in some detail, but we will not consider dry cleaning at length, since it is not suited to being carried on in the home. Many of the solvents listed are highly inflammable, and many serious accidents have resulted from their use in the home, where the precautions which are enforced on their use in industry are not and cannot be observed. Again, the quantity that should be used if satisfactory results are to be expected is equal to the water used in washing. This makes the cleaning of one or two pieces expensive and provides the problem of storing inflammable liquids which create a fire hazard. Ordinary electric machines for laundry should not be used in dry cleaning; their safety provisions, although satisfactory for washing, are inadequate for use with inflammable and explosive liquids. Furthermore, numerous machines are used for pressing and finishing the cleaned wool garment, and these machines are too expensive and too cumbersome for home purchase and use. In general, garments which cannot safely be laundered should be sent to a reputable dry-cleaning establishment when they are in need of a thorough cleaning.

The clothes moth. Much loss occurs in the home because of the destruction of wool and silk fabrics, furs, and feathers by the clothes moth. The damage is done by the larva or worm which develops from the moth egg. The larva feeds eagerly on one's choice wool garments, leaving them besprinkled with holes, seemingly always in the most irreparable places. One should be familiar with the appearance of the moth, the pupae case, or resting stage that comes between the larva and



U. S. D. A.

Clothes moth. *A*: Eggs. *B*: Larvae. *C*: Cocoon of case-forming moth. *D*: Cocoon of webbing moth.

the moth, and with the larva form of this pest if one would guard her wardrobe against its invasions.

Fortunately, the clothes moth does not like sunlight; therefore the sunning and airing recommended to maintain woolen garments in a fresh condition are a valuable first step in moth control. The next step is having garments clean and free from soil before their storage. Laun-

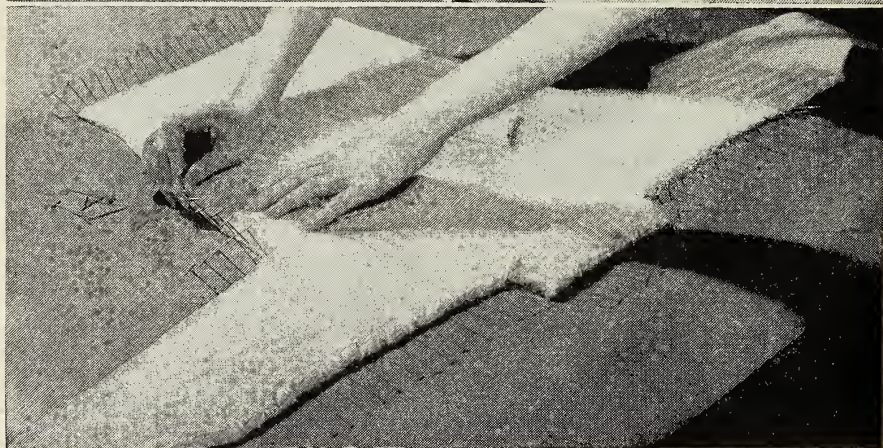
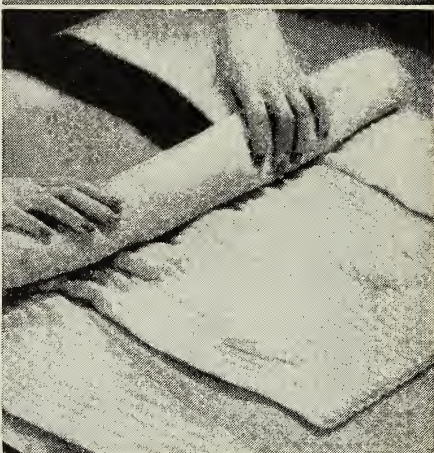
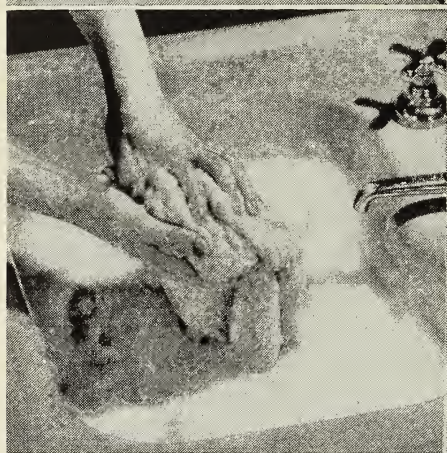
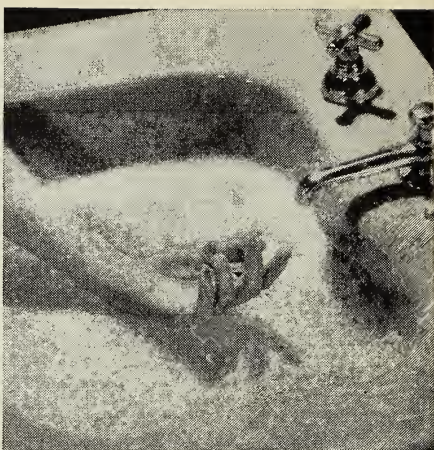
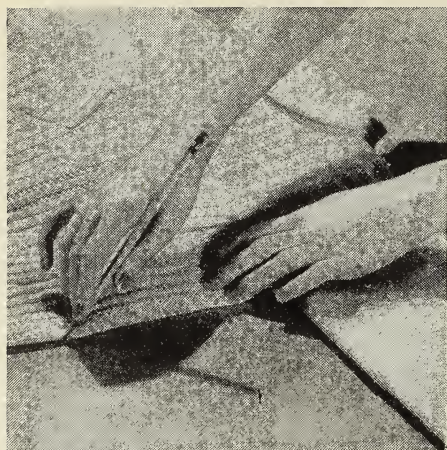
dering and dry cleaning, together with the attendant pressing of the fabric, are processes discouraging to the development of moth eggs and fatal to the larva already hatched and ready for destructive activity on a garment.

The third step in moth prevention is the use of an effective moth repellent sprinkled in the drawers or chests where such garments may be folded away. Familiar examples of moth repellents once in common use include camphor, naphthalene, cedar, and tar. The pungent odor of camphor moth balls coming from an inadequately aired coat after its summer storage is known to all. Now paradichlorobenzene is generally accepted as more effective and more pleasant than the repellents in earlier use. It is sold in bulk or under various trade names. Its high volatility causes it to pass from its crystalline form into fumes or vapors, and thus to create an atmosphere in which the moths cannot survive. Because of its volatility, its replenishment from time to time is necessary to maintain the desired protection in the closet or chest.

Laundering sweaters. Knitted garments present special laundering problems. The loose interlacing of the yarns in these garments makes unwise the use of the iron except for minor pressing. Inasmuch as ironing cannot be used to restore these garments to their original shape, it becomes necessary to shape them by stretching or patting them into their original outlines. In order to provide for the shaping of the garment, the following measurements should be taken and indicated on a sheet or a large strip of white paper:

Front length	Width of arm
Back length	Length of arm
Sleeve length	Waist measure
Width of back bustline	Hip measure, front
Width of front bustline	Hip measure, back

Sometimes it is more satisfactory to trace around the garment before it is placed in water. Using mild soap flakes and warm water, prepare a permanent suds. Immerse the garment in the suds and wash with a squeezing motion. Do not rub. The garment may be washed through two or more suds. When it is thoroughly clean, squeeze out the water with the hands, avoiding wringing. Rinse through several clean waters. Following rinsing, again squeeze the water from the garment, but avoid wringing. Place the damp garment on the sheet or paper on which the measurements have been placed so as to form an outline of the garment, pulling and patting it into the shape indicated. Slow drying is recommended. It may be necessary to turn the garment dur-




Makers of Lux

ing the drying process; if so, check the measurements at this time, further pulling and patting to maintain the desired size. With some fabrics the measurements must be checked a third time. When the garment is dry, a warm—not hot—iron may be used on the seams, the hemline, and on the details of the finish of neck, sleeves, and belt. Any pressing should be done on the wrong side of the garment.

Caring for rayon or silk garments. A satisfactory silk or rayon garment is one that can readily be maintained in its original shape and appearance. In general, garments of these materials are somewhat like wool in that they do not require the type of treatment needed to maintain cottons and linens. The daily care of the garment when in use is similar to that for wool, but more frequent pressing is often desirable. There are, however, silk and rayon materials designed to be laundered frequently. These are handled as are dainty colored cotton fabrics.

Dry cleaning. Many garments made of silk or rayon fabrics must be dry-cleaned, either because of the nature of the fabric finish or because of the design of the garment. Many fabrics of both rayon and silk are finished with soluble sizing which would be removed if the garment were to be washed. Such fabrics appear sleazy and often shrink excessively if cleaned otherwise than by dry cleaning. Designs which include circular cut skirts, shirrings, collars with pleated trimming, and intricately cut sleeves all demand dry cleaning.

←
Washing and blocking a knitted garment. *Top left:* Before washing a wool garment, draw an outline of it on heavy paper or take measurements. Wash wrong side out. *Top right:* Use lukewarm to cool mild suds; make them richer than for silks. Test the temperature with the back of the wrist. *Center left:* Squeeze the rich suds gently through and through the garment; handle as little as possible; never rub or twist. *Center right:* Rinse well in lukewarm to cool water the same temperature as the suds. Roll in a Turkish towel; squeeze out moisture. *Bottom:* Unroll at once. While still damp, ease garment to original measurements or shape to outline, holding it with rust-proof pins. Dry flat. Press out pin marks with a warm iron over a damp cloth.



**For
BEST RESULTS**

If you wish to wash

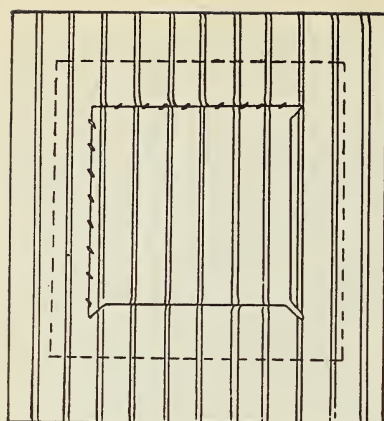
1. Use lukewarm water and a mild soap.
2. Dip and squeeze. Do not rub or wring.
3. Rinse in lukewarm water. Squeeze gently. Wrap in towel until partly dry.
4. Press on wrong side with a warm (not hot) iron.

If you wish to dry clean
Just inform your cleaner

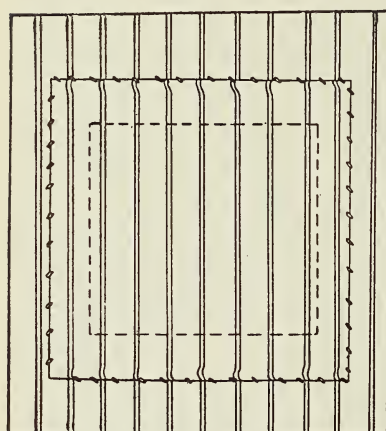
IT'S AN ACETATE RAYON

A-2682
Made in U S A

A reliable guide to the method of cleaning most satisfactory for a ready-made dress is often given on a label.



A RIGHT SIDE



B WRONG SIDE

The hemmed patch.

water-spot due to the presence of water-soluble finishing materials. When it is necessary to use moisture in pressing, the garment part should first be covered with a dry cloth over which a moist cloth is placed. Thus only steam, produced when heat is applied, reaches the silk fabric. Silks and rayons should be pressed from the wrong side.

Great difficulty is encountered if fabrics made wholly or in part of cellulose-acetate yarns are pressed with too warm an iron. Heat melts this fiber, and the iron may either stick to the fabric, or it may completely remove an area of the fabric which has come in contact with the iron.

Spot removal. Great difficulty is encountered in the removal of spots from silk and rayon fabrics. A ring is likely to be left after an attempt to remove a spot, due to soluble sizing which may be present in the fabric and to the closeness of weave of many such materials. The same technique for spot removal as suggested for wool is found to be satisfactory for silk or rayon. As with wool garments, however, a spot thus removed may leave a "clean" spot, very noticeable because of the general soil of the garment.

A slight water spot can sometimes be obliterated if the edges of the spot are scratched lightly, thus disturbing the yarn in the fabric. Often the presence of such spots necessitates the complete cleaning of the garment. Silk and rayon garments should always be pressed from the wrong side. A satisfactory method is suggested in the preceding problem.

Pressing the silk and rayon garments. Silk and rayon fabrics require special care in pressing. The temperature of the iron must be moderate or even cooler for light-colored materials. Fabrics of both fibers may



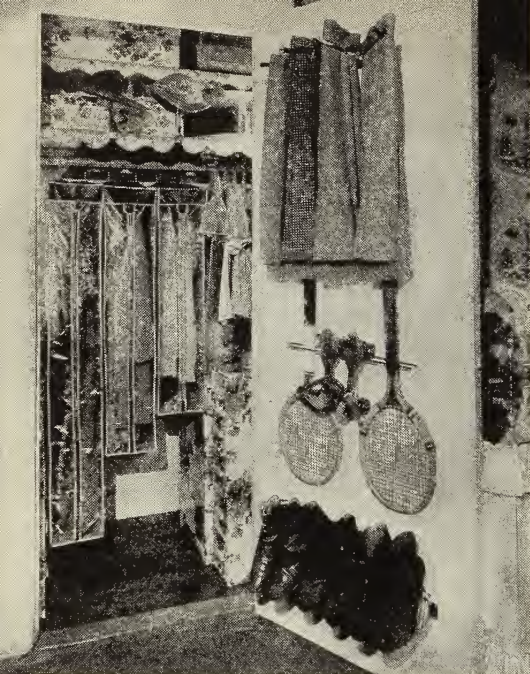
Mending a tear. *Left:* The straight tear or cut. *Center:* The diagonal cut. *Right:* The three-cornered tear.

Repairs. In order to give satisfying service, not only must a garment be clean, but it must also be in good repair. Prompt attention to necessary repairs lengthens the life of the garment and simplifies the mending problem. The old saying, "A stitch in time saves nine," is absolutely true. Interest in one's appearance and a desire to spend as little time as practicable in maintaining one's garments so that they contribute to a good appearance necessitate constant attention to clothing repairs such as sewing on buttons and fasteners, mending rips, and patching. The procedure for sewing on buttons and fasteners will be found on pages 429 to 431.

The mending of rips is usually done by hand sewing, using a running stitch with frequent back stitches and following exactly the original seamline. If the garment has been torn or if it is worn, the application of a patch may be necessary. For the repair of cotton garments, a hemmed patch is commonly used. It is made of material that matches that of the garment.

Hemmed patch. The following procedure should be followed:

1. Trim the hole to a rectangular or square shape, being sure to trim on the warp and filling threads.
2. Using a piece of matching material, cut a patch that is three-fourths inch or more larger each way than the hole to be patched.
3. Place the patch on the wrong side of the article to be patched, being sure to match any pattern as well as warp and filling threads, and pin it in place so that the edge of the patch is three-fourths inch past the edge of the hole on all sides.
4. Baste the patch in place a little more than one-fourth inch from the edge of the hole.
5. Clip the corners of the hole diagonally or on the bias about one-fourth inch, and turn back each side one-fourth inch. Baste.



Good Housekeeping Institute

An orderly closet arrangement provides ample space for hanging all types of outer wear. The drawers in the chest may well take care of hosiery and underwear. Knit garments may be stored in the boxes on the shelves.

are matched carefully and are drawn together with parallel rows of fine running stitches that are taken to extend into the fabric on either side and at the end of the tear to provide adequate reinforcement to the broken yarns. Irregularity in the length of the rows of stitches makes the darn less evident. In a three-cornered tear the rows of stitches should cross each other at right angles at the corner. A diagonal tear may be darned by replacing the warp threads with a fine running stitch and then weaving back and forth over them with a running stitch. A careful match of color and texture of yarn is important to satisfactory work.

Storage. The clean, repaired garment is stored until needed. Its appearance when worn will be largely determined by the storage facilities. Cotton dresses should be placed on hangers and then hung in a closet where there is ample space. If the space is crowded, the dresses will become crushed and wrinkled. Care should be taken to see that there is sufficient space so that one garment does not press upon an-

6. Turn the edges of the patch under one-fourth inch, and baste in position.
7. Now hold in place each turned-in edge by stitching with the hemming stitch.
8. Remove the bastings, and press the garment as needed.

Wool darn. The procedure for repairing a tear in fabrics of wool or similar texture is somewhat different from that commonly used for cotton, since with wool fabrics darning is more often used than patching. A tear may be mended by a darn, whether it is straight, the rent following directly either the warp or filling yarns; three cornered, the rent following one set of yarns and then the other; or diagonal, the rent causing a break in both sets of yarns for its entire length. In each case, the torn edges

other. Underwear, including slips, should be carefully folded and piled lightly in a drawer or a similar space in such a way that the garment will remain unwrinkled.

SUGGESTIONS TO THE CLASS

1. Keep a record of the care required for a simple cotton dress and a simple linen dress, noting the number of hours' service given by each dress from the time it is laundered until the next laundering, and the number of minutes spent in pressing each garment to keep it in condition between laundrings. Likewise compare the care required by a linen-like spun rayon with a linen garment.

2. Crush two pieces of linen fabric, and press one from the wrong side without the application of moisture. Press the other one after it has been thoroughly sponged. Note the difference in appearance.

3. Visit a large dry-cleaning plant and observe the procedure used in cleaning and pressing a wool garment. What precautions do such commercial plants observe to decrease fire hazards?

4. Bring to class samples of a number of kinds of soap—some common laundry soaps and some that are recognized to be mild. Also include some "soapless detergents" recommended for use in hard water as a substitute for soap. Shave a few flakes from each bar of soap. Place two or three drops of water upon the bits of soap. Test each soap solution with litmus paper. Which gives the strongest alkaline reaction?

5. Bring to class two light-colored silk or rayon garments, one that has been dry-cleaned, the other that has been laundered. Which one has the better general appearance? Are they both equally clean? Would both dresses lend themselves to dry cleaning? To laundering?

6. Choose a committee from your class to demonstrate the laundering of a silk or rayon garment, showing how the wash water is prepared, how the garment is handled in the suds and rinse waters, how it is prepared for ironing, and how it is ironed. What precautions should you take to prevent the color in the trimming of the garment from running into the body of the garment?

7. Bring to class devices that may aid in the proper storage of silk or rayon garments.

8. Demonstrate the removal of a small grease spot from a plain colored crepe fabric of medium color. Describe for the class the difficulties which may arise in attempting such a procedure on a garment that has seen some wear; on a fabric that contains some soluble sizing; and on a fabric that does not show balanced construction.

9. Demonstrate the removal of a water spot from a silk or rayon material. Explain the principle upon which this may be done successfully.

10. Demonstrate for the class the pressing of silk or rayon fabrics, showing how they should be protected from direct contact with the iron and how moisture may be applied without danger of water-spotting.

SUMMARY

There are many kinds of fabrics available on the market. Our selection must be made according to the use to which the fabric is to be put and the type of service to which it will be subjected.

The construction of the fabric—that is, whether it is of plain, twill, satin, pile, or other weave, or knitted—is found to affect the characteristics of the cloth and to determine largely its suitability for any use. Fabrics of plain weave are usually the most durable, other factors being equal.

The yarn used in the weaving, including its size, twist, and character, whether simple or complex, also affects the nature of the cloth made from it. Familiarity with yarns of various sorts is essential to an understanding of the characteristics of various fabrics.

The fiber or fibers used in the making of the yarns also determine in part the characteristics of fabrics woven or knit from the yarns. Knowledge of the characteristics of the various fibers and of aids to their identification is important in the wise selection of fabrics.

Structural design may affect the serviceability of the fabric. If there is a difference in the size of the warp and filling threads used in the design, the balance of the fabric may be destroyed and its durability may be lessened. If there are long floats that will soon break and roughen, or dots and figures insecurely fastened that may pull out, there are hazards to durability in the design of the fabric. Also the combination of fibers that require different cleaning processes has been found to lessen the wear that may be expected of a given fabric.

Design produced by dyeing or finishing may also affect the serviceability of the fabric. Fastness of color to sun, perspiration, and laundering is essential if the fabric is to give satisfaction.

Weakening of the fabric often follows the discharge of its dye in the creation of a design by discharge printing. Therefore this means of producing a design is, in general, less desirable than others. Wise judgment as to the desirability of a fabric is based on knowledge of the processes by which the cloth was constructed, of the type of yarn used in the weaving, and of the fibers from which the yarns are made, as well as the finishing processes to which the fabrics have been subjected.

8

Selecting Ready-made Garments and Accessories

The manufacture of many articles of dress has completely passed from the home. Shoes, hose, foundation garments, gloves, and hats, to mention a few, are commonly regarded as articles to be bought "ready to wear." There are other articles of dress which may be made in the home from purchased fabric or may be bought ready-made. The list of these varies from family to family and sometimes, for a given family, varies from year to year. If you were to question the class as to what garments are made at home, replies might indicate that in certain families nightwear, underwear, and house dresses are made at home; in other families such articles are purchased ready-made, but coats and wool and crepe dresses are made in the home. In families where there are a number of small children, the making of children's garments is sometimes undertaken in the interest of economy. Some mothers make their children's garments because of the pleasure and satisfaction derived from the task. In still other cases, all apparel is purchased ready-made, the home sewing being restricted to necessary adjustments on purchased garments and to the stitches necessary to keep the wardrobe in repair. Only when the need for economy arises do some women make garments for themselves and their families. If they have had little experience, the results of their efforts bring doubtful satisfaction and they return to the purchase of ready-made garments. Seeing such wide differences in the buying habits of people, we are interested to know on what basis decisions are reached as to whether garments are to be pur-

chased ready-made or constructed in the home. In every home, then, to a greater or less degree, the selection of ready-made garments becomes important.

1. What shall be considered in choosing between ready-made and home-constructed garments?

Satisfaction the first consideration. Perhaps one of the first statements people will make when questioned as to their reasons for making certain garments at home or for buying them ready-made relates to the *satisfactions* received. "I like the things I make," says one woman. "The colors are as I choose, the fit is right, the fabrics are durable, and because I have made them, the wearing of these garments gives me satisfaction." Another woman may say, "I like best the clothes I buy. I know exactly how they will look before I add them to my wardrobe, and because I haven't worked long hours to make them, they seem to have a snap or style that I cannot give to dresses that I make. I live in the city and, by shopping, I can find the colors I like." The satisfactions with which these women are concerned are, in the main, subjective and personal, and each follows her present practice largely because of these. However, there are what may be termed objective considerations that should be given to the matter before a final decision is reached.

Scope of the market. The first of these is the scope of the market where one's shopping must be done. If the choice among ready-made garments is so limited that one must take an outing flannel nightgown of outmoded design instead of the Tommie coat that was pictured in a recent magazine, one may decide to select a fabric and pattern and make the desired garment. If the ready-made dresses are all in yellows and browns when one wishes blues or greens, the limitations of the market may cause one to construct the dress at home. Or if print dresses are all that the store is showing when it is known that a dress of plain fabric will be enjoyed for a much longer time, one is wise to have the dress made.

Personal physical characteristics. Another factor that may lead a girl to decide to make her clothing at home is that her body build may make for difficulty in finding suitable and attractive garments. For example, a schoolgirl may be larger than average in build, requiring a dress of size 20 or 38 that will yet reflect a youthful spirit. The ready-

made dresses in that size available locally may be suitable only for someone more mature. In order to secure clothing appropriate to her years and activities, this high school girl may be forced to make her clothes or have them made in the home. The tiny college student, size 10 or 12, may find a similar problem in the type of apparel made in her size. In this case, she may be unable to buy an evening dress, and the coats that fit her may be too youthful. She, too, may find home construction of clothing essential to being well dressed. Marked figure defects, such as being hunch-backed, having extremely large hips, thick waistline, or an unusually long or short waist, may make selection from ready-to-wear stock impossible. In such cases, home construction from a carefully adjusted pattern is the only way of gaining a satisfactory dress.

Home sewing to extend budget. Other points to be considered when choosing between making clothes at home and purchasing clothes ready-made include the time free for sewing, the funds available for the clothing budget, and the skill or the ability of the worker. If the clothing budget is small, it is usually necessary to supplement the money that is available with the expenditure of time and effort. Even though the worker does not possess special skill, the saving of a few cents on each garment is a matter of necessity. Home sewing makes it possible to make over or to mend garments and thus save the money that would have been needed for new ones. If the worker is skilled and the garments that she makes compare favorably with those bought ready-made, home sewing may result in real saving with less money spent for the necessary articles of apparel. This allows the girl or woman to indulge herself in some of the things she would like to have but might otherwise not be able to buy—an extra hat, for example.



Intelligent shopping for dresses requires careful consideration of one's needs as well as recognition that the color and lines of the dress are "what they are wearing."

The girl who is employed away from home for a seven- or eight-hour day for five or six days in the week will have little free time that may, in fairness to her job or to her own health, be spent in constructing garments. She is one who will in most cases purchase her wardrobe ready-made unless she is unusually talented and the making of a dress is the way in which she enjoys spending her leisure time.

Earnings from home sewing. On the other hand, the homemaker whose family is such that she has hours of being alone may enjoy supplementing the family income by her own skillful efforts spent in constructing garments. The high school girl, either working with her mother or, if she has had experience, working alone, often makes garments for herself during the summer months. It is possible that the cost of the fabric, thread, and other findings needed for the homemade garment may be so nearly that of the ready-made one as to allow only a few cents an hour as earnings. Even so, if the time is not needed elsewhere and the work is enjoyable to the worker, home construction of garments may be of advantage.

In answer to the query: "Does it pay to sew at home?" the replies given by a group of homemakers in one of our central states were compiled. They agreed that it is about as cheap and much more satisfactory to buy work clothes, men's suits, shirts, heavy coats, and most underwear ready-made. They believed that the greatest savings through home sewing came from the making of cotton dresses. The saving often was as much as 64 per cent of the cost of a similar dress bought ready-to-wear.¹ Some wool and rayon dresses made at home showed about the same saving on a percentage basis, but there were a number of instances when an actual loss through home sewing was reported. Such losses arise because mistakes are made that cannot be remedied.

Let us see what can actually be saved on a wool dress made at home. We are assuming that the dress fits well and is satisfactory in every way. The following expenditures were made:

2½ yds. wool crepe @ \$3.98.....	\$9.95
pattern .....	.50
zipper .....	.30
thread, 3 spools @ .05.....	.15
covered buttons.....	.25
rayon tape.....	.30
	<u>\$11.45</u>

¹ Annual Report of the Director, Agr. Exp. Sta., Univ. of Wisconsin, Bul. 442, p. 36, 1938.

A similar dress may be bought ready-made for \$19.95. The saving is \$8.50 or 42.6 per cent of the cost of the ready-made garment. Savings of such amounts are indeed worth while. It may be that a computation of the cost of the fabric, thread, and finishings of the homemade garment may be so nearly that of the ready-made one as to allow only fifteen cents an hour as the worker's earnings.

Skill of the worker. If the worker has a flair for fashion and a skill at detail, she may make dresses, evening dresses, and coats, turning fabrics worth but a few dollars into garments that, sold ready-made, would bring several times the cost of the materials. Then her skill brings a large money earning. If she is a careful, neat worker, but lacking in this fashion flair, her smaller earnings on garments that have been described as relatively standardized—such as sleeping garments, aprons, underclothes, and house dresses—may permit the extension of the limited clothing budget. Thus she may be able to purchase certain ready-made garments desired because of their worth and their fashion value.

A personal problem. It is difficult to advise others as to what garments should be bought and what should be constructed in the home. The problem becomes for each one of us an exceedingly interesting one, involving a criticism of one's scale of values, one's aptitudes or skills, and one's ability to carry a task undertaken to a prompt and satisfactory completion.

SUGGESTIONS TO THE CLASS

1. Compare a ready-made garment you have had with one of home construction, considering the cost, the time spent in acquiring the garment, and the becomingness of the garment. Were you better satisfied with one than with the other?

2. With the aid of her mother, Frances Bell made all of her dresses during her years in high school. Upon completion of high school she obtained a position and has devoted but little time since to making her dresses. Her mother is unable to assume the responsibility without her help. Is Frances using good judgment when she buys her clothes ready-made even though she spends more?

3. Consider the variations from the average figure proportions that may cause difficulties in buying ready-made garments. Among what group of people will we find the most difficulties—high school girls, women of thirty years, or women of sixty-five years?

4. From your own experiences cite instances in which the ready-made garment failed to fit the one who tried it on. Does price range have any

bearing on fitting qualities of the garment? Does the product of any one manufacturer fit your needs better than that of others?

2. What is a satisfactory ready-made dress?

In any one year there may be placed on the retail market almost two hundred million ready-made dresses. Doubtless fabrics from every fiber and of every weave and color are included in these figures, and the designs for the dresses represent every kind from the sophisticated evening frock to the simple house dress. The prices of these garments range from several hundred dollars paid for an exclusive model by a woman of wealth to the price of two or three dollars paid for a service dress by the person of limited means. In the first case, style is all-important; in the second, durability is sought. In each case it is important that the dress give satisfaction to the buyer. True satisfaction may be had when one has learned to judge design for its beauty and becomingness, materials for their good qualities, workmanship for high quality, and the entire garment as it is tried on for proper fit.

Quality of the fabric. The color and the design of the ready-made dress often seems more important to the buyer than good workmanship or proper fit. However, several other things should be checked to determine whether the dress will prove a satisfactory purchase. First of all, the fabric used in the construction of the dress should be satisfactory. It is more difficult by far to be sure that the fabric used in a ready-made dress is of good quality than it is to check the quality of fabric that is sold by the yard. It is almost impossible to obtain a sample large enough to make any tests that might aid in identifying the fiber or in determining the durability of the dress when it is laundered or when it is exposed to the sun. Labels that identify the fiber and those that carry guarantees that the fabric is colorfast and completely preshrunk help the buyer to make a wise choice. It is also becoming increasingly important that the garment bear a statement as to the cleanability of the fabric. Those materials that require dry cleaning should be so labeled, and those that require special care in laundering should carry directions for their proper handling.

Proper cut. The second point to be considered is the cut of the garment. There should be an ample allowance for fullness where fullness is needed. The width and the height of the upper part of the sleeve, the

length of the underarm seam, the width across the shoulders and chest, and the measurement of the bustline and the hip-line, should all be carefully noted and checked. The simplest way of checking the ampleness of dress measurements is to try on the garment. If the measurements are found satisfactory, attention should be turned to the design features of the dress, such as pleats, tucks, and gathers. Skipped allowance for such details of the design of the dress stamp the garment as poor quality. If pleats form part of the skirt design, they should be deep enough that they are not completely stretched open when the wearer walks or sits down. If gathers are used in either the blouse or skirt, sufficient material should be introduced that the fabric hangs in soft folds. Be careful also to see that diagonal lines are not created from the yokeline toward the underarm seam in either the blouse or the skirt. This indicates a poorly cut garment.

The cutting should be further checked to see that all pieces of the dress are cut from the same fabric and on the straight warp yarn of the goods, with due regard for any "up and down" that the design of the fabric may have. Not infrequently a dress will be found with one sleeve cut somewhat on the bias or the wrong way of the pattern. Sometimes too, the back of the blouse and the sleeves are cut crosswise of the fabric to save material. A check of such matters before buying is the only wise course to avoid dissatisfaction in the garment.

Seam width. The wrong side of the dress should be inspected to see if the seams are deep enough to permit any necessary alterations. One should also look at the workmanship to see if the seam finishes are neat, durable, and not bulky, and if the stitching is straight, even, and strong. Pinked seams are often used in crepe and wool dresses made from material that does not fray. It is also a satisfactory finish for firmly woven cotton fabrics for other than children's dresses or utility garments. The seams of fabrics that tend to ravel should be finished in some way that does not add to their bulk. The seams of children's dresses and utility garments are often flat fell or French seams. Both withstand many launderings.

Dresses of good quality are made with underarm seams an inch or



The sanforized label guarantees that a blouse will not shrink more than 1 per cent.

more in width, in both the blouse and the skirt. These wide seams provide material for letting out if the hip measurement of the purchaser was larger than average or if the dress shrank when it was washed. At the waistline of the blouse a seam one inch or more in width is often provided for those who are long-waisted or to allow for shrinkage.

Construction. You might score the construction of the dress in your mind much as you have scored your own work and that of your classmates, noting particularly the set of the fabric at the neck and the armseye. If it puckers and pulls there, the dress should no longer be considered for purchase. A well-made dress is reinforced at points where much wear comes. The neck and lower edge of the sleeve both must take much strain and are usually faced to prevent stretching. A stay-tape at the waistline prevents it stretching when the garment is cleaned.

A dress should have an ample hem. There are many dresses made with only sufficient hem to serve as an edge finish. These are generally unsatisfactory for any girl than the one who is below average in height who may use the extra length as a hem in her dress. Before buying a dress have the skirt length measured to assure yourself that the garment hangs evenly or if it requires straightening, and be sure that there is ample length for the needed hem.

We anticipate that fasteners will need to be sewed on firmly after the purchase of the garment, but the dress should be checked to see that the fasteners are of the size and type suited to the fabric and to the place where they are used. Fasteners should meet exactly, and those that are intended to be invisible should be completely hidden by the placket. Zippers should be so set in the dress that they operate easily and do not bulge.

Size of the dress. Unfortunately, the size of the dress is not always represented by the size it is marked. A girl whose measurement would indicate that she should wear size 16 states that she has been fitted in dresses that vary in their marked sizes from 14 to 18. She checked the fit of the garments by trying them on. She frequently finds that dresses marked 16 are either too large or too small.

Until recently no attempt had ever been made to base the sizing of garments on a uniform standard. In 1937 nearly 150,000 children from four to seventeen years of age were measured, and these measurements were studied to gain a better idea for sizing garments. It was found that age was one of the poorest indications of body measurement. A combination of height and of hip girth is now recommended as the basis for

sizing garments. Several thousand women were also measured to arrive at a better basis for marking garment sizes for adults. The recommended method of sizing has not yet been widely accepted by dress manufacturers, but it is possible to buy garments made by some producers so marked. The "proportioned sizes" in dresses put on the market by a few manufacturers is a step in this direction. An increasing number of producers are advertising dresses for the person "5'5" and under." It would be much easier to select dresses if the marked sizes represented uniform measurements. Some day more dress manufacturers may decide to accept the suggested plan.

A final test. After careful attention has been given to these points, the design of the dress should be examined for pleasingness and simplicity. Consider carefully whether the dress will require special care to keep it looking fresh. Are there cuffs and pocket trims that must be washed daily?

The lines of the pattern should repeat those of the body. Any decorative notes should be simple and, as a rule, placed so that they emphasize the face of the wearer. Variety may be provided through changes of scarves, collars, cuffs, and belts.

The design of the fabric and the design of the dress must be considered together if a satisfying result is to be obtained. The bright plaids and the gaily flowered batistes and lawns require relatively large unbroken areas if their effect is to be pleasing. Yokes and godets, pleasing in a design for a plain fabric, seem to lose their interest when made up in a flowered cotton fabric. In such cases, the design of the fabric seems also to conceal the lines in the dress design.

The dress should be tried on in a dressing room that is well lighted by daylight, so that any streaks of fading color or any fabric defect may be seen. One should stand in front of a triple mirror and view the garment from all sides, protesting any effort of the clerk to fold out in her hand fullness that later will require a more permanent adjustment. There should be room for the arms and shoulders to move easily; the skirt should not bind or pull up when one is seated; and there should be a feeling of freedom if the fit of a garment is to be declared good.

In order to avoid too loose a fit, the seams that outline the dress, such as the shoulder seam, the neck seam, and the underarm seam of waist and skirt, should be checked to see if their placement agrees with the body lines to which they are related.

Finally, even though the dress when selected from the rack was believed to be of the color, texture, and line direction that would be be-

coming, it should be studied for its general usefulness. White braid stitched upon blue or black crepe will appear soiled long before the fabric itself seems to need cleaning. For the same reason a white piqué vestee that is firmly held to a twill sports dress by two rows of machine stitching cannot be considered a desirable feature. School dresses are commonly cleaned by laundering. If the dress is to be washed and ironed, designs calling for circular skirts, bias capes, numerous ruffles, and the like should not be chosen. Ease of care should be an important factor in the choice of the design for the cotton dress.

Intelligent shopping for a ready-made dress requires critical consideration of many points and cannot be accomplished by the use of snap judgments nor by accepting the flattering statements of the saleswoman who is more anxious to make a sale than to please you.

SUGGESTIONS TO THE CLASS

1. For a number of years Marie had made her own dresses, which had proved very satisfactory. She then went to work in an office and found no time for her sewing. Of what value will her knowledge of construction be to her? Will she have gained any knowledge of fabrics that will be beneficial? Make a list of guides to the purchase of ready-made garments that can be acquired through experience in construction.

2. Collect a number of labels and classify them according to whether they are informative or noninformative. What information would you like to find on labels of the ready-made dresses that you buy?

3. Helen is a growing girl. It is necessary for her mother to purchase Helen's dresses ready-made. What problems will she meet in making her selections?

4. Examine two ready-made crepe dresses which sell for \$12.95 and \$19.95, respectively. Compare the workmanship on these dresses. On what is the difference in price based?

5. Study a number of the current fashion magazines and note the trends of fashion, considering color, silhouette, and fabric. Examine a group of ready-made dresses for evidence of these trends.

3. How shall skirts, blouses, sweaters, and slacks be selected?

Skirts. A separate skirt, either of wool or cotton, is an important garment in the schoolgirl's wardrobe. Because a skirt may be worn with a number of blouses or sweaters, it permits much variety in the ward-

robe. It is valued also for economical reasons. The girl herself can keep her skirt in press, and by wearing it with a fresh blouse, may present a spick-and-span appearance with very little effort. Gay plaids and stripes that would be difficult to make into a whole dress or would seem to be too gaudy in larger amounts may be enjoyed in a skirt. The material should be firm and crease resistant.

Skirts are either gathered, gored, or pleated. A well-cut gored skirt, made of a material that lends itself to trim tailoring, is the most easily cared for. Be sure that the seams of the skirt are so placed as to provide a flare where you need it. The measurement at the hemline should be ample for taking long steps.

The pleated skirt may be one with pleats all around or with pleats grouped at the back and front. The pleats should be deep enough so as not to suggest a skimmed cut. If pleats are too shallow they cannot be kept in press. The same rules apply to the selection of a skirt as suggested for the dress.

Blouses. The high school girl's choice of a blouse is usually from among the tailored or semitailored types. She has little use for a dressy blouse because this seems to belong with a dressy suit, and these she leaves to her older sister. The popular blouse to wear under a sweater or without this popular part of a schoolgirl's wardrobe is the tailored blouse. It is many times made of a cotton fabric in either white or colors. Rayon crepe is also popular. Some blouses have long sleeves, others short. The necklines vary, but the convertible collar is well liked because it is becoming and protects the neckline of the sweater or jacket under which it is worn.

In selecting a blouse, it is well to follow the suggestions given for the choice of a dress. Special attention should be given to the length of the blouse. It should be long enough that the wearer can move freely without the blouse pulling up over the waist band. It is well to buy the blouse amply large to allow for shrinkage, unless it bears a label stating that the fabric will not shrink.

The trim of blouses is usually held to tucks, stitching, and buttons or other simple forms that will launder easily. If the blouse is to be worn with a tailored suit, it is well to try on the blouse with the jacket to make sure that the neckline fits well. Some small, round collars on blouses are tapered to a mere band at the back of the neck so as to avoid the unpleasant tendency for a blouse collar to work up over the back of the suit collar. A dickey may take the place of the blouse for wear with either a suit or a sweater.



Reprinted from "Mademoiselle," August, 1947

The pullover sweater with its matching cardigan is the ever popular choice of the high school girl.



Davenshire, Inc.

Well-tailored slacks fit snugly at the waist but are roomy enough for comfort through the hips.

Sweaters. The qualities in a sweater which make it popular for sportswear set up problems in choice-making. Sweaters are usually made of a loosely knitted fabric which "gives" or stretches with every movement. Because of this quality, sweaters are often bought in too small a size with the result that they cling too closely. On the other hand a sweater that is too large looks untidy. Be sure to try on the sweater before purchasing it because sizes have not been standardized and the stretch of the fabric cannot be predicted. The armseye should not bind, and if the sleeves are long they should be long enough to fit down over the wrists. Examine the sweater to see that points where strain occurs are reinforced. The shoulder seams and buttonholes are often stayed with tape or ribbon to prevent undue stretching. Sweaters may be had in a variety of fibers, but wool is the most popular because it is warm yet light in weight. Wool sweaters can be badly shrunk if they are handled incorrectly in washing. Cotton sweaters, especially in the cardigan style, have been popular in light colors and are inexpensive.

Slacks. Slacks must be made of firm material if they are to have the trim, tailored appearance desirable in such a garment. Gabardine of cotton or of spun rayon is a popular choice among less expensive garments. Sharkskin and wool flannel are also satisfactory materials because they lend themselves to tailored finishes. Slacks must be fitted carefully if they are to be comfortable and are to give a reasonable amount of service. Examine the wrong side to assure yourself that the seams are well finished and that the placket closes accurately. Slacks should always be tried on to be sure that the waistline fits snugly and that there is sufficient room through the hips to sit comfortably and to stoop. If you are one of the girls who is somewhat broad through the hips, avoid slacks. They will not become you. Leave the wearing of slacks to your narrow-hipped friend. If you must wear them, do so only at such times as you are engaged in some form of active work for which trousers are necessary for safety or convenience.

SUGGESTIONS TO THE CLASS

1. Assemble six or more ready-made skirts representing various designs and fabrics. Examine these for finish and construction, including seam finishes, hem, belt, and placket fasteners. Are the plaids matched accurately? Are the pleats deep enough to be satisfactory? Are there sufficient fasteners to close the placket and to adjust the belt?

2. Compare several ready-made blouses for methods of construction and

for size. Are the garments so made that they will withstand many washings? How do the measurements compare with similar ones on a dress of the same size? Are the measurements of blouses the same in those marked the same size?

3. Visit a ready-to-wear department and ask the salesperson to show you slacks made of various materials. What methods of construction and design features do you find that you consider desirable? Design a pair of slacks, including the most desirable features found on these that you have studied.

4. What is a satisfactory ready-made coat or suit?

Just as there is a wide variety of dresses on the market so are there many different kinds of coats. They vary in line and in the idea expressed, from the formality of the velvet evening coat or of the Persian lamb fur coat, to the comfortable and informal reefer or sport coat. Nothing seems much more out of harmony than a coat that is intended for a purpose different from that suggested by the other clothing with which it is worn. The first question in selecting a coat is, therefore: "What sort of a coat is it that I wish to buy?" A dress coat, furred and belted, a sport coat of tweed or wool fleece material, a leather jacket, or a white summer wrap? When you have decided upon the type of coat to buy and know the amount of money available for the purchase, there are perhaps five main points to keep in mind if you are to make a wise choice.

1. A satisfactory fabric must be used for the garment.
2. The lining and interlining, if used, must be of durable and suitable materials.
3. The design and cut must be satisfactory.
4. The trimming and finishing detail must be in keeping with the design and anticipated durability of the coat.
5. The garment must have been manufactured under fair labor standards.

The fabric. Let us consider the first point. Fabrics used for coats vary somewhat from season to season, but one may usually find tweeds, homespuns, gabardines, and camel's hair fabric for sportswear, and also a number of napped-surface fabrics such as suede cloth and melton for dress. Tweeds, homespuns, and certain firm diagonal weaves, if made of a good quality wool fiber, will shed dust, will remain relatively free



McCall Corporation

The belted jacket suggests sportswear, whether it be used as a separate garment or as a part of the suit. The corduroy in the suit on the right further reflects the sturdiness of sportswear.

from wrinkles, and will keep their trim, well-tailored appearance even though they are given much hard wear. Fabrics made from wool that is mixed with other fibers often are not so satisfactory because these fibers may not withstand the crushing and the hard wear that wool does. If a fabric is not 100 per cent wool, it may be made of wool and cotton, wool and spun rayon, wool and synthetic protein fiber, wool and nylon, or wool and mohair. This last named combination of fibers is usually quite satisfactory because mohair is a durable fiber. Even though the fabrics made from combinations of wool with other fibers are not so good as all wool, such materials meet the need for fabrics less expensive than all-wool.

There is now a federal law requiring that all fabrics made in part or entirely of wool be labeled by the manufacturer. There must be a statement as to whether the wool is new, reprocessed, or reused, and what amount of each fiber is used. New wool is wool from the fleece of a sheep which has never been made into a material. Wool fiber reclaimed from woven or felted materials that has never been used is reprocessed wool. Reused wool is that made from fabrics that have been used and discarded. The word "wool" means that only new wool has been used in the fabric.

Tweeds and gabardines are ideal for service coats. Napped-surface fabrics, unless of a good quality, have been found to show wear even to the extent of losing their nap if the coat is given hard wear. Coatings that resemble camel's hair fabric vary widely in price. Some are made of all wool, and others are made of mixed fibers. Only those actually made of camel's hair should be so labeled. These fleeced fabrics are especially popular because they lend themselves to the ever popular sports- or trench-coat style of garment. Meltons of good quality, although napped, are durable and, because they are closely woven, keep out the cold. Corduroys and velveteens also have their day among sturdy coat materials.

Loosely woven fabrics are a poor choice for a coat because they catch and snag easily, and the fabric loses its shape when worn. Although satisfactory for occasional wear, the soft pile fabrics are not a wise choice for coats that must serve for both school and dress.

The lining. The lining of a coat is given perhaps four or five times the wear that is given the crepe dress worn under it. The coat is jerked on and the lining is pulled; the movement of the body causes a rubbing of the surface of the lining; and as the coat is dropped from the shoulders as one sits, the lining may be given twists that pull the fabric, par-



The rough surface of tweed adds to its interest and contributes to its popularity for sportswear.

ticularly at the seams. Because of the expense and inconvenience of frequent relinings, we all want to purchase a coat so well lined that it can stand all the various kinds of wear. Fabrics used as lining in men's coats, where durability is demanded, are often a twill weave of celanese or other synthetic fiber. These have a wide popularity as linings for women's sport coats. The fabric is often guaranteed to last the life of the garment and a statement to this effect is stamped on such fabrics when sold by the yard. For dress coats crepe linings or those of satin weave are in common use.

Interlinings, placed in the coat to provide added warmth, may be of outing flannel, chamois skin, wool flannel, or quilted wool padding. Of these, the interlining of quilted wool is often preferred as affording the most warmth while being very light in weight. Outing flannel is used in less expensive coats.

A lining fabric should be resistant to water spotting, proof against perspiration, and should not rub off or transfer its color to the garment worn under it. If possible, the lining should be examined to see that the seams are wide enough to prevent pulling out. The lining of any coat should be larger than the coat itself, especially across the width of the back. The extra material, laid in folds, should be pressed flat and held to the coat with cross-stitches or feather stitch.

The lining of a winter coat is usually hemmed separately from the coat and held to the coat at the side seams with French tacks.

The design. The design of the coat should be conservative, expressing in its proportions, its color, and its trim the design principles already discussed. The more limited the wardrobe, the more important it is that the color and style be such that they do not definitely "date" the coat. The cut should be generous, with a lap of several inches in front and with enough room in the shoulders and sleeves to permit easy movement of the body. The length should be considered in relation to one's height, the type of coat, and the length of the dress. High school girls have shown a preference for coats which serve more than one purpose, such as the reversible coat for rain or shine, and the coat with a zipped-in lining. When it is possible to add to the warmth of a coat by merely adding an extra lining, the interests of economy are well served.

The workmanship. The workmanship in the construction of a coat is more difficult to evaluate than that in a dress, but one can always see if the machine stitch is small, if the stitching of the seams is even and unbroken, if the buttonholes are neatly and securely bound, and if the pockets are neatly and securely stitched. If the garment shows numerous loose threads, if the lining is not placed so that the warp yarns of the fabric are in true vertical position, and if the hemline seems uneven, there is reason to question the quality of the workmanship throughout the garment. One should not purchase a coat without assurance as to its serviceability and satisfaction in use.

Other marks of a well-made coat are easily recognized if you have had a little experience. Careful staying of the front edges with tape is one of these. This is done to prevent stretching and twisting of the front edges. The hem of the coat is finished with silk ribbon and is usually separate from the lining. The manner in which the lower corners of the front facings are finished is another mark of the quality of a coat. Good workmanship calls for a hem in the bottom of the coat that continues across the facings. The fold is usually left open at the lower edge. A strong thread shank formed between the button and the coat prevents the button tearing the fabric behind it. A small button on the underside of the front facing is also used for this purpose. Buttons should be of a good quality and so made that they will not cut the buttonhole or the thread used to sew on the button. They should hold their color without fading.

Fur trim. If you must have fur on your coat, choose a coat having a fur collar that seems to be related to the fabric in texture and color, and one that holds a promise of lasting as long as the fabric of the coat. A



"Ladies' Home Journal"

This is a coat that will serve many purposes. It is roomy enough to wear over suits and yet it will look well worn with dresses.



The Consumers' Protection label is designed to give assurance of satisfactory working conditions.

good piece of fur is uniform, thickly haired, soft, and pliable. Do you know that furs differ greatly in their probable serviceability in use? Among those regarded as most durable are otter, both natural and plucked, bear, beaver, and mouton lamb. Next comes seal, mink, and skunk. Persian lamb, muskrat, and racoon are average or slightly above. Nutria, opossum, mole, and lapin or rabbit stand lowest in the list.

Labeling of furs. Many trade names applied to furs have led people astray in their evaluation of them. To meet this condition the Federal Trade Commission ruled that in the description of the fur the correct name must be stated last, preceded by the name of the fur the piece has been dyed to simulate, as "beaver dyed rabbit," "seal dyed muskrat," etc. Furs not made to appear as those of other animals, but dyed, blended, or tipped, must also be labeled so as to show what has been done to the fur, as "black dyed wolf" or "dyed otter."

Consumers' Protection Label. Important, too, is the assurance that the garment has been manufactured under fair labor standards. Desirable working conditions will prevail only when consumers are interested enough in them to require that the garments they buy are manufactured under satisfactory working conditions. The label which manufacturers of coats and suits are permitted to use when official inspection proves that fair labor standards prevail in their firms is shown on this page. Every woman should look for this label when shopping for these garments.

The suit. Many of the same suggestions that have been given for the choice of a coat apply to a suit. A tweed or a flannel suit is a popular selection of the schoolgirl. A dressy suit is seldom purchased. If you are purchasing a suit, look for the same marks of quality that describe a good coat. The skirt is usually rather plain because the material that will tailor well is too bulky to allow for much fullness. The jacket may be lined or unlined. If it is unlined, the seams should be finished so that



Abraham and Straus, Inc.

The sheet-plastic raincoat and head covering is a valued form of protection for the suit in either rain or snow.

no raw edges are exposed. This usually means that the seams are bound with ribbon. Suit coats are seldom interlined.

Raincoats. Raincoats are either waterproof garments (those made of materials through which water cannot pass) or showerproof garments (those that will merely shed a few raindrops).

The first type of raincoat may be made of fabric treated with rubber, oil, or plastic. It may be made entirely of rubber, or it may be made of sheet plastic. A hood of the same material as the raincoat, made with a shield to fit down over the shoulders to keep rain out of the neck of the coat is often added to the outfit. Some girls choose a square of plastic to tie over their heads to give the same protection.

These waterproof garments may be bought in a wide range of prices. The thin sheet plastic coat or cape is often inexpensive but is not durable. It tears easily when worn, and often does not last through even a few weeks of storage. It is likely to split either because it is cold or because it has become brittle. If one will look upon these coats as garments which help to preserve more valuable clothing, perhaps even their short period of service is worth the investment. Most of these waterproof garments, either of coated fabrics or of plastic or rubber, are lightweight, colorful, and are cut roomy enough to be comfortable. The better quality have taped or sealed seams, a wide front lap, or a means of fastening the coat, and roomy shoulders so the garment can be worn over another coat. These coats should be stored in a cool, dry place. They may be most satisfactorily mended by patching, using a piece of the coat taken from the belt or hem and rubber cement.

Showerproof garments are those made of such fabrics as gabardine in either cotton or wool. The fabric has usually been treated with a water-repellent finish. Sometimes this fabric is used to make one side of a reversible coat. In any case, the coat is usually intended to be worn as a topcoat as well as a raincoat.

SUGGESTIONS TO THE CLASS

1. You are to buy a new winter coat, and desire to obtain the most satisfaction for the money that you have to spend. List the purposes that the coat must serve. What color will be most satisfactory for your needs? What qualities must the material possess?

2. Collect a number of illustrations of coats and suits that meet the requirements for good design. Analyze each design for line direction and line character. Are the coat designs such that they might be termed staple, or do they express the latest mode?

3. Examine a number of winter coats to learn what materials are commonly used for coat linings, and what are commonly used for interlinings. Can you judge the quality of the lining by inspection? Does the price of the coat bear any relationship to the quality of the lining? Are reinforcements placed in the lining where the greatest wear is likely to come?

4. Compare coats of three different prices as to quality of material, workmanship, beauty of design, and trimming. Does price hold a definite relationship to the quality of the garment?

5. Bring in labels from coats or suits that give information as to the quality of the fabric and that guarantee against shrinkage. What verbal guarantee as to the durability of the garment was given by the salesperson?

6. A high school girl has a definite amount of money to spend for a coat. She has shopped in several stores and has found one coat trimmed in self-material. It is well cut and is most becoming to her. Another coat, also becoming and within her price limit, has a large fur collar. What should she consider in choosing between the coats?

7. Ask a well-informed merchant to discuss with the class the relative qualities of various furs used to trim coats, and the guides for judging good quality furs.

5. How shall ready-made undergarments be selected?

The frequent debates between mother and daughter as to what are adequate and well-chosen undergarments indicate that a change is taking place in our ideas of what is right and proper. Much of the heat of these discussions could be eliminated if we would realize that what we wear or do not wear is a matter of custom rather than morals. Then the point of the debate could be kept on the basis of what undergarments may contribute to our well-being, either in personal comfort or in the ease with which the apparel is cared for, and on the kind of undergarments that are needed to give us a well-groomed appearance.

Use of undergarments. Undergarments are worn to offer protection to the wearer against cold and heat, as well as from possible irritation from outside garments, to protect the outer garments from perspiration and other body soil, and to serve as the foundation of the costume. Consideration of what articles, and how many articles, should be worn should always be related to these purposes. Since modern houses and public buildings are steam heated, the high school girl of today need not wear the red flannel drawers or the black knit tights that were essential for even moderate comfort to the girl of fifty years ago.

The activities which most girls enter into make necessary ease of movement and simplicity in dress. Hence wholly unsuitable are the hoopskirts and voluminous undergarments worn in the middle of the past century by "the feminine, fair and frail." Emphasis upon the activities engaged in by girls rather than emphasis upon the expression of false modesty has led to a simplification of apparel far beyond that which the woman of seventy-five years ago would have thought decent.

The very simplicity of line emphasized today in apparel for school and office makes necessary the limiting of the undergarments worn to those essential for figure control, and for protection to the wearer and to the outer wear.

Undergarment fabrics. Fabrics coming in contact with the skin should be soft and pleasing to the touch, and should absorb moisture readily without clinging to the skin. They should be easily laundered, without loss of the original finish of the cloth and without change in the shape of the garment. If ready-to-wear garments are selected, care should be taken to avoid seams that are conspicuous in their placement or heavy in their finish. A flat-felled or flat-lock seam finish is both durable and inconspicuous.

Most undergarments are made of cotton or rayon fabrics. Cotton has the advantage of being inexpensive, durable, and easily washed. Rayon in the finer qualities is smoother to the touch than cotton. Rayon fabrics may be highly durable in the better grades, but they always require special care in washing, drying, and ironing. Rayon fabrics are much weaker when wet than when dry and should not be pinned to a line, nor worn until they are completely dry.

Nylon undergarments, which are rather expensive, wear very well. Especially is this true if they have been made with ravelproof seams. Both woven and knitted nylon fabrics are in use. Neither should be ironed because nylon is thermoplastic, that is, it melts at ordinary ironing temperatures. In most cases nylon materials have been blocked or "boarded" so that they tend to return to their original shape, wrinkle free.

Knitted snuggies, ideal for wear in cold weather, are sometimes made of cotton yarn, of cotton and wool, or of wool and rayon. Both woven and knitted materials are used for underwear. Knitted garments have the advantage of requiring little ironing but they may stretch.

The foundation garment. A foundation garment is regarded by some girls as one of their essential undergarments. It is usually not worn for school and sports but is needed to give the desired firmness to the hips

under a crepe dress or under an evening dress. A girdle or a pantie girdle is the popular choice.

For the slight figure of the average high school girl, the knit "two-way stretch" girdle is wholly satisfactory. This is usually of a step-in type, rolled into position on the figure. If the girl is plump, the girdle with a firm panel back and front gives better results. The girdle may be worn with a separate brassiere, or the brassiere may be combined with the girdle in the process of manufacture to form the one-piece foundation garment. The girl who is stoutly built will find the garment that hooks and fastens with a slide fastener most satisfactory.

The properly fitted foundation garment tends to conform to the lines of the figure and yet mold it to more pleasing contours. It should be long enough to come well over the large part of the hips, and high enough at the waistline to hold any surplus flesh in place. The size is usually determined by the waist measurement, which is taken at the normal waistline. Heavy boning is rarely essential or desirable, either for the young girl or for the adult. If there is a specific need for it, it should of course be used. The foundation garment should be properly fitted and have at least four supporters but preferably six. When fastened to the hose, these should be so adjusted as to place no undue strain on the hose, yet firmly enough to keep the hose in good position on the legs. Pantie girdles usually have removable supporters so that the girdle may be worn without hose.

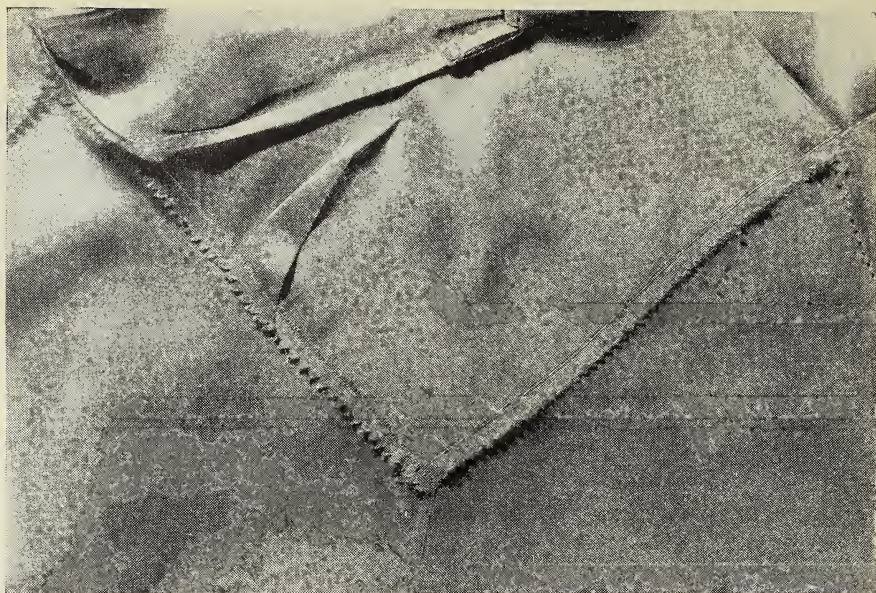
Brassieres. A brassiere, when well fitted, contributes to the pleasing appearance of the figure. If the girl is well developed through the bust, a brassiere should always be worn with a sweater or a dress that fits snugly. The well-chosen brassiere is made from firm material or double net or lace, and is so adjusted to the figure as to give firmness of line. It should never be tight enough to cause constraint of the muscles. Some designs depend upon bias cut to give the desired ease and yet provide control. Elastic straps contribute to the wearer's comfort and ease of movement.

Panties. Panties are necessary articles of underwear. Most of those bought ready-to-wear are made of knit fabric because this material is highly elastic. Panties vary in design from those with legs cut to fit snugly almost to the knee to those that are so brief as to be only crotch length. It is important in selecting panties to see that the seams are flat and are placed so that they will not show through the outer garments. The cut should be such as to provide sufficient roominess for free body movement and freedom from constraint. The crotch length in the



Cleanliness Bureau

Girdles should be scrubbed frequently. A thorough washing with a brush in warm soapsuds, careful rinsing, and drying in the shade insure life.



This slip will probably give good service. Note the felled seams in the skirt, the lock stitch used to attach the double top to the skirt of the slip, and the carefully made straps which may be adjusted in length.

back should be 7 to 9 inches longer than that of the front. The finish of the leg should be such that it is not noticeable through the outer garments. Fullness at the waist should be controlled either by an elastic band to which the fabric is joined or by an inconspicuous yoke.

Slips. It is as important to have variety in your wardrobe of slips as it is to have variety in your dresses. Slips serve as a foundation for the dress. For the sheer dress, the cut of the slip should harmonize with the design of the dress, and the color should be that which matches or complements the color of the dress. For the opaque dress, a crepe or a wool for example, the important thing to think of is a perfect fit and comfort for the wearer. A dark slip is usually better to wear under a dark dress than one of white or tea rose because many materials are woven so that the light color of the undergarments gleams through the dark dress unpleasantly. Moss crepes and lightweight wool fabrics, particularly, are likely to appear to be of poor quality unless worn over a matching slip. Satin slips are often a poor choice to wear under sheer materials because their sheen will be more evident over the curves of the body than elsewhere, and will attract attention to the slip rather than to the dress.

Slips are made of woven or knit fabric. Woven materials for slips in-

clude silk and rayon crepes and satins, and cotton slip fabrics. Knit slips are usually made of rayon. Slips made from these fabrics come in a wide range of prices. However, cotton slips are the least expensive in the long run. They launder easily and are durable, but they have the disadvantage of clinging to clothes worn over them and binding over the knees. Silks and rayons are smooth, and clothing slips over these fabrics easily. Taffeta slips are usually durable but they have been found to hold body heat and are therefore uncomfortable to wear in warm weather.

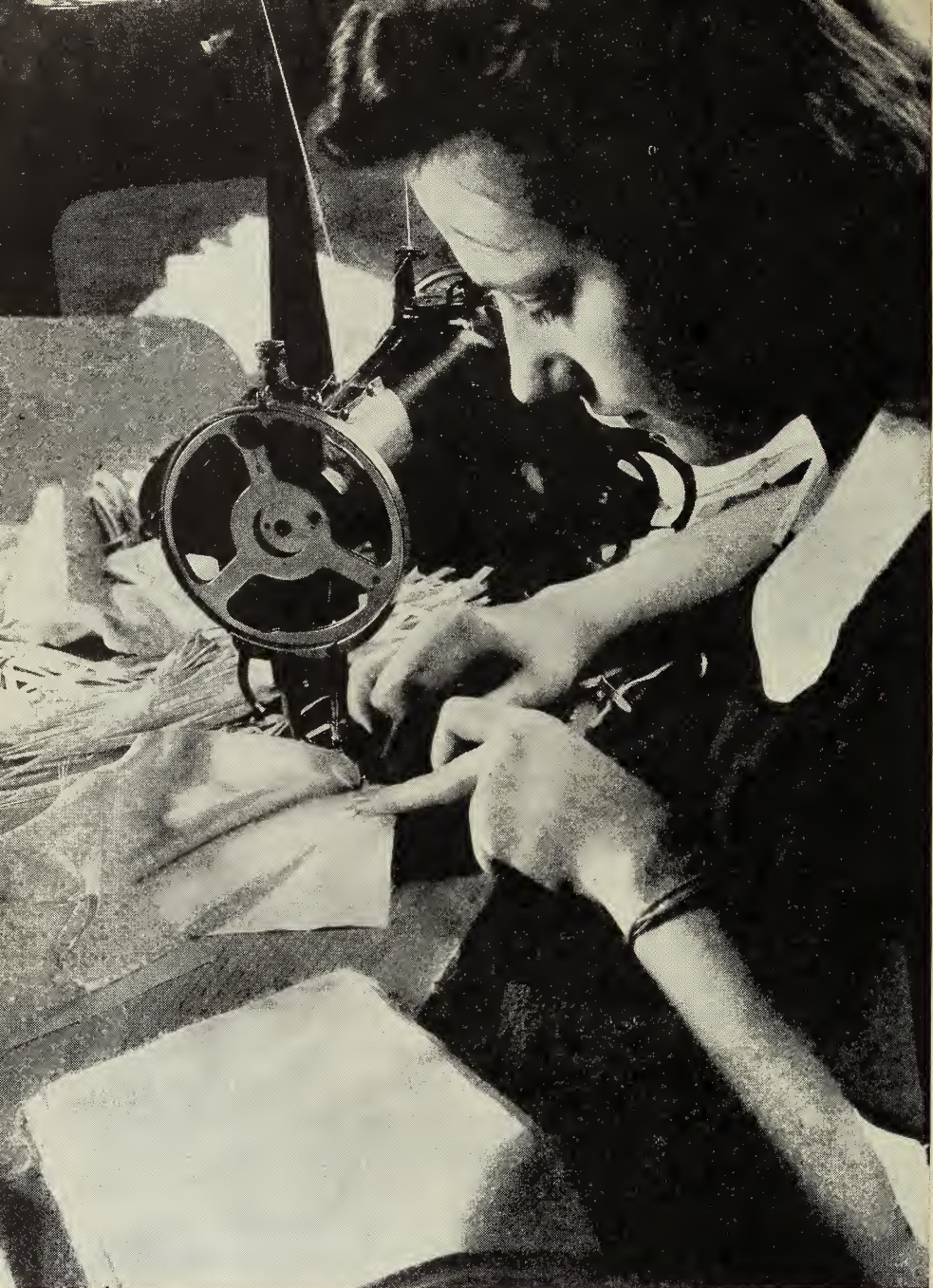
Test the fabric of the slip to be sure that the weave is balanced. You can do this by gently stretching the fabric between your thumbs. If the yarns spread, you may expect the material to give poor service.

Woven fabric slips are cut either straight or bias. Straight cut slips do not ride up over the knees when one sits down, but they have the disadvantage of not fitting so smoothly around the waist. Bias slips have the advantage of fitting well around the bust and waist. If they are cut on the true bias, they tend to hang more evenly, and because they are bias they give easily with all of one's body movements. Bias slips are usually made either with two gores or four gores. A shadow panel, made by stitching in an extra thickness of material across the front of the slip, is desirable in garments to be worn with thin dresses.

The trimming of one's slip deserves a little thought. For general wear the simple tailored slip is the most satisfactory. Some tailored slips have a little fagoting or machine-made embroidery that does not detract from the wear or make the garment difficult to iron. For the most part, however, trimming on a slip does not wear well and shortens the service it will give. Lace trimming is usually fragile and wears out before the fabric does.

The top of a slip is designed in a number of ways. The double top, cut V-shape, is one with which you are familiar. It often fits well and because it is double, wears well. The bodice top, cut straight around, is good to wear under blouses. Other slips have brassiere tops; some are cut with a deep round neck.

The seam finish is especially important to the wear of the garment. Seams should be flat, smooth, and so well made that they last as long as the fabric. Some garments have what is called "rip-proof" seams. Many inexpensive rayon slips have such poorly made seams that the garment pulls apart at the seams long before the fabric is really worn out. Fine stitches made with strong thread insure greater wear. The seams of rayon slips should, in general, be finished with a flat fell to



The Barbizon Corporation

A process in the making of a tailored slip. Note that the shoulder straps are attached as the garment is made.



**THIS IS A
TESTED
PRODUCT**

Fashonia Rayon Crepe Slip

Fashonia Rayon Crepe Slip
Made to Specifications Developed by
BUREAU OF STANDARDS

HOW IT WILL WEAR

- Firmly woven fabric of satisfactory strength.
- Strong, durable seams.
- Excellent resistance to thread slippage.
- Good color fastness to washing and perspiration.

HOW TO MAKE IT LAST LONGER

- Dip garment gently in heavy suds of neutral soap in lukewarm water. DO NOT wring or twist; rinse thoroughly and squeeze water out. Iron with warm (not hot) iron on wrong side.

WHAT IT IS MADE OF

- Acetate Rayon Warp and Viscose Rayon filled Crepe, with average finished thread count of 156 x 110.

A Complete Testing Report is Available **C**

An informative label which tells how the slip will wear, how to make it last longer, and what it is made of is a valuable guide to the buyer.

assure long wear. Some seams in rayon bias slips are made as a lapped seam. The stitching is done with a "zigzagger" to form a lock stitch, and the edges to the wrong side are pinked. These are fairly durable but even though the seams do not pull out, there is a great amount of fraying on the wrong side.

Shoulder straps should be strong, sewed on securely, and are best if adjustable in length. However, the change in length should be made to allow for only slight changes in the length of the slip.

Slips may be had in three lengths, those made for tall girls, those for medium height, and those for short girls. Slips cut for short girls are often sold as half sizes. Try on the slip before you buy it to assure yourself of its fit. Does it bulge at the waistline? Does it hang evenly? Is it long enough?

Knit slips of good quality are ideal to wear under school clothes or for sportswear. They are comfortable and are easily cared for because they do not require ironing. They must be dried flat on a table or hung evenly folded over a line so as to prevent stretching while they dry. Some of these knit slips are runproof. When you buy, ask the salesperson for assurance that the slip will not run if you do not find a label on the garment that states this fact.

Half-slips or petticoats. Some girls like a slip that extends from the

waistline to the hem of the dress. These are made of knitted or woven material. Some half-slips are made as a wrap-around skirt and are lapped over in the back. Colored taffeta half-slips or petticoats are popular and add "swish" to the costume.

Two-color slips. A white camisole top is sometimes used with a dark skirt in slips intended for wear with suits. It is possible to buy these in fabrics that do not fade in washing. Be sure, however, to obtain a guarantee against fading in washing before you make a purchase.

Sizes of slips. The regular sizes of slips range from 12 to 20 and from 32 to 44. However, slips for shorter girls are marked 31½, 33½, and so on. It is also possible to obtain junior sizes, which are numbered 9, 11, 13, 15, and 17.

SUGGESTIONS TO THE CLASS

1. Louise Hill's mother has always purchased her daughter's underwear for her. This season Louise is to have full responsibility for the purchase of this part of her wardrobe. What are the difficulties that she may encounter in selecting durable and comfortable ready-made undergarments? What steps can she take to arrive at satisfactory purchases?

2. Make a poster showing the changes that have taken place in undergarments in the past twenty-five years. What characterizes the undergarments of today, when contrasted with those of years ago?

3. Compare the advantages of a bias cut slip with those of a straight cut slip; a knit slip.

4. Collect a variety of ready-made slips, panties, and brassieres. Judge each group of garments as to durability, comfort, and ease of care. Plan an outfit of undergarments for the high school girl that will serve as the proper foundation for a number of dark cotton dresses; a dark red knit dress; a lightweight wool dress; a dark green silk dress; and a bright blue party dress. Estimate the cost of such an outfit.

5. Examine a number of styles of panties and note the various finishes used. What type of seam is least conspicuous? What type of seam appears to be most durable?

6. Collect samples of material used for making slips. Give each the thumb test for slippage. Wash each fabric to determine the presence of soluble sizing or finish. Compare as to cost.

7. Bring to class dresses made of different materials and suited to different occasions. Plan the undergarments that would serve as a satisfactory foundation for each.

8. Select pictures of slips having tops designed in different ways. Suggest the importance of choosing designs that will harmonize with the lines of the dress with which the slip is to be worn.

9. Have a salesperson demonstrate to you the advantages of the properly fitted foundation garment.

6. What are satisfactory sleeping garments and robes?

Garments for lounging and sleeping are an important part of our clothing needs. A third or more of the twenty-four hours in the day is spent wearing this type of clothing, and yet some of us give but little thought to the selection of this part of our wardrobe. What qualities do we look for in sleeping garments and in robes to wear over them? Comfort comes first and, after that, ease of care, durability, and becomingness are important. Perhaps, too, we look upon these garments as giving us an opportunity to indulge our liking for colors that would not be satisfactory for wear at school or on the street.

Pajamas. Pajamas are the choice of sleeping garments for many girls because they provide complete covering and cannot roll up as the wearer turns in bed. Pajamas are made in tailored styles and in styles that are quite softly feminine. Tailored pajamas are the best choice for everyday wear because the lines are simple and all trimmings are flat and easily ironed. Facings are a common kind of trimming. They offer opportunity for pleasing contrast in color, texture, and fabric pattern. The more feminine designs are usually fuller in cut, especially so far as the jacket is concerned; and may be trimmed with ribbon, ruffles, shirring, smocking, embroidery, or lace. In choosing pajamas of any style, care should be taken to avoid those that, because of their cut or trimming, will interfere with the comfort of the wearer. Some girls carefully avoid the choice of pajamas that have a collar because it will not stay in place when the wearer is sleeping. Special attention should be given to the waistband or other modes of fastening the pants to insure comfort. The pants with some styles of summer pajamas are short, reaching only about halfway between the hip and knee. These are popular because they are cooler.

Materials from which pajamas are made may be of cotton, rayon, or silk. Cotton is by far the most common choice. Cotton fabrics are inexpensive, launder easily, and are comfortable to wear. Percale and broadcloth are practical woven cotton materials, and because they come in both plain and printed designs, are widely used. Cotton crepe is also a satisfactory material because it requires little ironing. For summer wear,



Bates Fabrics

Tailored pajamas are year-around favorites in the wardrobe of the high school girl.

batiste or lawn, both thin cotton fabrics, are often used for pajamas. The color range is limited only by one's taste.

For winter wear, outing flannel, a cotton fabric napped on both sides, ranks high among woven fabrics. It is warm and soft and, therefore, comfortable for chilly nights. Many girls like knitted fabrics for winter wear. Knitted materials are usually less bulky than woven, and have the desirable amount of "give" or stretch that one looks for in a sleeping garment. Cotton knit pajamas often have long sleeves with snug wrist bands, and the legs are finished with a snug band at the ankle to keep the pants' legs from pushing up.

Rayon knit materials are also used for pajamas. To be really satisfactory, the fabric should be of nonrun construction. Rayon fabrics, known to be weaker when wet than when dry, often show a broken yarn even after careful washing. It is from these broken yarns that holes start and develop into runs unless the material is so knit as to prevent it. Knit rayon of a good quality is fairly expensive but is especially comfortable because of its softness and its elasticity. Rayon knit pajamas must never be pinned to a clothesline to dry, as holes may be torn in the fabric. They should be rolled in a towel after rinsing to absorb excess moisture; then they should be either laid flat or hung evenly over a line out of the sun in still air so that wind does not make pins necessary.

Pajamas for year-around wear are made of rayon or silk crepes and satins. These garments, as is true of pajamas made of other material, are to be had in tailored or in feminine styles. Tailored crepe pajamas are usually trimmed with stitching or bindings. Those that are softer in line are often lace trimmed. Before choosing lace trimmed pajamas, be sure that you examine the lace to see that it is not so made that parts are weak. Breaks in the lace may make the garment look frazzled long before it should have to be discarded. Avoid purchasing those garments in which the lace has been used where strain comes. Lace shoulder straps, for example, unless carefully reinforced will not stand strain. Lace is often set onto the garment with a zigzag stitch. This is desirable because it finishes the edge of the lace more firmly than it could have been done with an ordinary machine stitch. Garments on which lace is hand sewn are expensive but are often more daintily made than machine-stitched ones.

Examine carefully the pajamas that you are about to buy to see that they are well cut and well constructed. The pants should be wide enough through the hips and deep enough in the crotch that they do not bind. The leg length should be such that the hems reach your in-

step. The coat should be broad enough through the shoulders for comfort. If the sleeves are long, they should cover the wrist bone. It is often well to try on the pajamas before taking them from the store to be sure that you are buying the proper size. Sizes of these garments have not been standardized and cannot be depended upon to be uniform. Some are sized by age, such as 12, 14, and 16; others are marked small, medium, and large; while others may be designated as 14, 15, 16, and 17. In this system of marking, 14 indicates a bust measure of 32 inches; 15, 34 to 36 inches; 16, a bust measure of 38 inches; and 17 indicates a bust measure of 40 inches.

The garment should be examined to see that it is of good construction. Seams should be finished so as to leave no raw edges exposed. A flat fell or French seam is the most durable seam finish for garments made from woven fabric. Standing fell seams often pull out because one edge of the fabric may be held with only two or three threads. All places where strain comes should be well reinforced so that the garment does not rip at these points. Is there a guarantee that the fabric will not shrink? If no such assurance may be had, it would perhaps be well to buy the garment a size larger. Pajamas that are tight are not comfortable nor do they wear well.

Nightgowns. Nightgowns are preferred by some girls because of the added freedom that they provide. They are also completely feminine looking and will be chosen by the girl who likes this type of garment because she enjoys the long, sweeping lines that hang floor length.

Nightgowns, like pajamas, may be had in both tailored or soft frilly styles. Designs free of all but the simplest flat trimmings are the best choice for everyday wear. Nightgowns may be bought in practically all the materials that pajamas are made of, with one or two exceptions. The most notable exceptions are percale and broadcloth. These fabrics seem too firm for gowns, and the designs in the printed materials seem unsuited for this purpose. Among cotton fabrics used for nightgowns are outing flannel, longcloth, and nainsook. Batiste and cotton crepes are also popular for summer wear. These materials are often white but may be had in pastel colors.

Gowns, like pajamas, may be had in knitted materials, both of rayon and of cotton. Gowns made of woven material may be cut straight of the goods or on the bias, each style having its particular advantages. Bias-cut gowns fit more smoothly than do straight-cut garments, yet "give" or stretch when the wearer moves so as to be comfortably loose. The seams of bias gowns are finished in a variety of ways just as are

those of bias slips. The quality of the material from which they are made will determine what is a satisfactory finish. The straight-cut gowns usually are more roomy than the bias-cut ones; hence, their seams suffer less damage in wear and laundry.

It is important that you try on the gown before purchasing it to be sure that the size is correct. If there is no guarantee that the garment is made of shrinkproof fabric it is advisable to buy one the next size larger, as was suggested in the purchase of pajamas. It may be slipped on over your dress so as to cause little bother in fitting. Note carefully the construction, to be sure that seams are well made and that points where strain comes are reinforced. A skimmed cut, carelessly made seams, and other items of poor construction are the marks of an unsatisfactory garment.

Robes and housecoats. Girls enjoy the long, sweeping lines for which lounging costumes are known. Besides the fact that a robe or a housecoat is decidedly useful as a covering for pajamas or nightgown, they appeal to a girl's desire for the "grown-up-ness" and elegance that only a floor-length skirt can satisfy.

A wide variety of materials are used in robes and housecoats. The ones best liked are usually nontransparent so that only a minimum of clothing need be worn underneath. Negligees of chiffon, dimity, or batiste do not belong in the wardrobe of a high school girl. She enjoys rather the sturdier materials that require no special slip or undergarment to make them satisfactory. Cotton, rayon, silk, and wool fabrics are all used for lounging garments but, of these, cotton fabrics are the most common. Gay prints, either in crepe or percale, are a popular choice for housecoats as are seersuckers and piqués. These fabrics, if of good quality, launder well, and give long service. They should be shrinkproof to be truly satisfactory. Robes or housecoats of these cotton fabrics may be worn the entire year around. However, the girl who wants a warm cotton garment for lounging will consider corduroy, velveteen, terry cloth, deep-pile chenille, or candlewick fabric. Velveteen is the only fabric among these that may not be cleaned by laundering. Of course, any of these will require special care in handling if laundered to be sure that the colors do not fade or that the garment does not stretch out of shape in drying. Among the rayon or silk fabrics are moiré, taffeta, upholstery material, jersey, rayon challis, crepe, and satin. These fabrics are much more elegant than cottons and are often most durable.

A tailored style in a robe or housecoat is usually the first choice of the



A robe made on simple lines is the first choice of the high school girl.

high school girl. The dirndl type garment is a close second. Lounging garments are made either as wrap-arounds or as those zipped up the front. Both designs have advantages, but for the girl who likes to wear her robe for evenings of study, the garment that closes with a slide fastener is the most practical. However, the robes with zipper openings are sometimes difficult to purchase.

Warm robes are sometimes made of quilted materials. Calico, chintz, rayon crepe, or satin are quilted over sheet wadding or cotton. The effect produced is a texture which does not permit further trimming of the robe. Quilted robes are usually best cleaned by dry cleaning. Wool materials used for lounging are jersey, flannel, and blanket cloth;

but these are expensive because so much material is required to make them. They are cut long and full and are usually made with long sleeves.

The robe or housecoat offers the opportunity for enjoyment of gay colors unsuited for daytime wear. However, it is well to remember that the color of lounging garments should be really flattering to the wearer. A robe for travel should be subdued in color and design. Maroon or dark blue is a good choice, and if the material is figured the pattern should be small, as a check or dot.

A lounging garment should be tried on before it is purchased. It is only reasonable to expect it to fit as well as a dress fits, with all its parts accurately cut. It also should be examined for well-made seams and sturdy facings.

Because housecoats and robes, even to a greater extent than dresses, are made under conditions of mass production and are priced to sell at a relatively low mark, evidences of careless workmanship are frequent. It is well to examine the garment to make sure that all parts are cut from the same fabric with due regard for yarn direction and that no part has been skimped. Avoid a garment that has decorative fasteners or trim-

mings that will not wear as well as the garment itself. Size markings are usually similar to those of dresses, that is, sizes from 12 to 20. Some housecoats or robes, however, are sold as small, medium, and large.

SUGGESTIONS TO THE CLASS

1. As a class, visit the underwear department of a department store. Arrange to have the buyer show you a variety of pajamas and nightgowns. Note the prices of garments made of woven fabric and compare with those of knit garments.

2. Compare the measurements of two or more pairs of pajamas of different makes or designs, noting particularly the length of coat, center back; width across the shoulders; length of sleeve; length of leg; depth of crotch; width through the hips.

3. Take the measurements of a rayon nightgown before laundering. After the gown has been washed, take the measurements again and compare with those previously obtained. The garment should be laid flat on a table while measuring.

4. Bring to class several robes or housecoats. Examine them for workmanship and finish. Contrast the finish of these garments with that of ready-made dresses, comparing a cotton housecoat with a cotton dress or a corduroy robe with a corduroy dress. Are there important differences to be noted?

7. How shall footwear be chosen?

Footwear is an inclusive term designating shoes (festive and frivolous, sedate, or sturdy and businesslike), hose (filmy and fragile or woolen and warm), galoshes, rubbers, and toe rubbers. You surely have chosen some, if not all, of these items during the past year. You are fortunate if your selections have been so wise that you do not have a pair of shoes that are uncomfortable, a hand full of hose with runs, or perhaps a pair of galoshes or boots that do not fit your shoes as a reminder of your lack of efficiency in buying.

Because shoes and hose represent large items in most clothing budgets, a mistake in their selection is usually a costly one. Such a mistake points out our error in judgment and makes us want to be wiser next time.

Buying shoes. No other part of the body must be clothed so carefully as the feet if one is to have health and comfort. Undue pressure on any part of the foot is quickly reflected in one's facial expression and oftentimes by one's disposition. Shoes often contribute to foot ailments, and



Before you buy shoes, have your foot measured in both a relaxed and a standing position.

it should be remembered that the feet are part of the body. Foot ailments are therefore bodily ailments. A perfect fitting shoe may be had for nearly every type of foot. Unfortunately, many of us do not have access to a wide enough selection to find the shoe that is completely satisfactory. Therefore, we still hear some people say that they cannot find comfortable shoes.

Shoes may be had in many grades and in a wide variety of prices. Some of the lower-priced shoes are not in reality a good investment, but because of limited purchasing power, some people have to buy them. It is possible to obtain your money's worth among shoes selling for five or six dollars as well as those selling for twice the amount. The difference is in the quality of materials and kind of construction.

Let us see what points we should look for in buying shoes.

1. Shoes should be fitted not less than one-half inch longer than the foot measures when the weight of the body is resting upon it.
2. The shoe should be wide enough so that the feet do not feel as if they were held in a vise. Tight shoes interfere with free circulation and prevent muscular action.
3. The shoe should have a toe sufficiently broad that the big toe is not thrown out of line. The five toes need space so that they may spread out naturally and comfortably.
4. The inside line of the shoe should be straight, as this follows the line of the normal foot.
5. The large toe joint should fall at the widest part of the shoe.
6. The shoe should fit snugly at the heel and over the instep.
7. The shoe should have a moderately flexible shank except in cases where the wearer is very heavy, is on her feet much of the time, or has fallen arches or some other foot condition which makes extra support necessary.



An X-ray picture of the foot in shoes of different types indicates the importance of the shape of the shoes to the comfort of the wearer. *A*: Foot badly cramped by pointed toe. *B*: Generous toe room.

8. Shoes should be made of porous materials which will allow air to enter, permitting any perspiration present to evaporate. Any unglazed leather is suitable, but patent leather cannot be recommended.
9. High heels should be avoided for walking or standing. In fact, they have no place in the wardrobe for working hours.
10. The size of a shoe as given by the manufacturer is an expression of the relationship of the length to the width. The size, in so far as length is concerned, ranges from size 1, which is $8\frac{2}{3}$ inches long, to size 12, which is $12\frac{1}{3}$ inches long. The width is indicated by letters, quadruple A or AAAA representing the narrowest last, and double E or EE representing the widest last. Knowledge of the relationship of length and width needed for a shoe to fit one's foot is of first concern if pain and wasteful purchases are to be avoided.

Misuse of feet. Foot difficulties are often the result of having worn, at some time, shoes that have deformed the bones of the feet. Do not let your desire for shoes that flatter your feet lead you to choose shoes that are not comfortable. Take plenty of time when you select shoes to try them on and buy only if they are comfortable. Shoe sizes have not been standardized, and until they are it will be necessary to give careful attention to fitting each pair. It is a serious mistake to insist on a particular size which you have bought before. Your feet may have grown in the meantime, or the proportions of the shoes may differ.

In fitting shoes to feet that show the ill effects of poorly fitted shoes,



"Better Homes and Gardens"

Take proper care of your shoes if you would enjoy their greatest usefulness. Remember to wash the laces as well as to care for the leather.

an attempt must be made to select the size and last that will bring the greatest comfort. Callous spots and corns often disappear when shoes that cause neither pressure nor friction are worn. The discomfort due to enlarged joints can often be relieved if shoes sufficiently long and somewhat narrower than the usual width are worn. The shoe with a straight inner line from heel to toe should be chosen rather than one in which the inner line swings outward. Authorities in the field of hygiene and physical education recommend that shoes with rigid shanks be avoided even by those who have "fallen arches." Shoes with such construction give temporary relief but should not be worn continuously as they cause the muscles of the foot to become weaker.

How shoes are made. No material has been found which serves as a good substitute for leather in the making of shoes except for a few limited cases. Common kinds of leather are kid, goat, kangaroo, cowhide, calfskin, reptile, elk, and calfskin suede. Calfskin suede is either sheep or calfskin, finished flesh side out. Gabardine and canvas are the

best known fabrics for shoes. Sheet plastic and lasticized leather or lasticized fabric have a limited use.

A last or form is made of wood, and the leather or fabric is stretched over it. Then a sole is attached by one of several methods. The last, one for the right and one for the left foot, determines the shape of the shoe. The method of attaching the sole has a great deal to do with the flexibility of the shoe. The common ones are known as the Welt, McKay, Littleway, Goodyear Turn, Cemented, and Stitchdown.

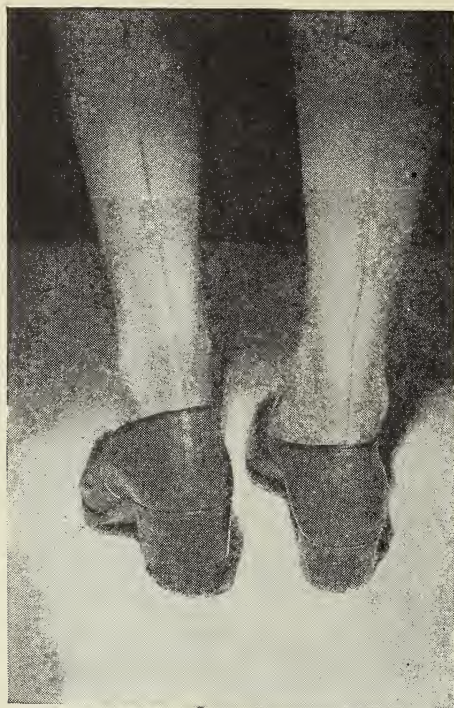
Shoes for school and dress wear. For school wear, a low-heeled Oxford of calf or bucko is found to give the most satisfying service and to be well suited to the active life of school halls. The saddle shoe is a popular example of the Oxford. Loafers that are cut high enough to fit up over the foot are also a good choice and are preferred by some girls. For dress, although a somewhat higher heel is commonly preferred, good taste and appreciation of line should prohibit the purchase of the spike heels on which the wearer totters about hampered and unstable in her movements. Kid, suede, patent, and fabric all have been popular for dress wear.

Many women find their shopping for shoes greatly simplified if, having found a last that is comfortable to their feet in the proper length and width, they buy shoes of the same last and size, season after season. Usually the manufacturer changes the pattern of punched holes and stitching often enough that there is no danger of monotony by such a practice. High school girls may find it worth while to try this method of securing comfortable, well-fitted shoes.

Shoe design. Much might be said of the importance of shoe design in the development of a pleasing ensemble. The shoe has lines and proportions that may be pleasing or otherwise. The design of the shoe may be such as to make the wearer look awkward, or it may contribute to her poise and attractiveness.

The lower heeled shoe or sandal, popular choice of most girls, allows her to walk easily and gracefully. In general, the simpler shoe designs are the most beautiful. There is a trend away from shoes that are elaborately cut.

Care. Begin caring for shoes from the day you buy them if you want to obtain the most service from your purchase. The salesperson will be glad to tell you how best to clean the leather and will advise you about the use of special equipment for keeping your shoes in good condition. A rubber sponge is necessary, for example, to keep suede shoes in good condition. There are shoetrees that help to keep shoes in shape. Neutral



Consumers' Guide

Top left: The heel of the foot should be gripped snugly by the shoe when the heel is raised slightly off the floor. *Top right:* Is the shoe long enough? *Bottom:* The ball of your foot should come to the widest part of the shoe.

shoe dressings are sometimes recommended to aid in keeping clean elk or two-toned saddle shoes.

The care given shoes has much to do with the length of wear that may be expected from them and how long you will enjoy wearing them. Clean, well-polished shoes, even though they are no longer new, can add much to the appearance of the wearer. They may even be resoled and yet look neat and trim. Watch the heels and soles of your shoes so as to have them repaired before they have lost their shape. You will thus assure a good appearance at the same time you are safeguarding your shoe bills.

Need for standard sizes. Because practically all shoes are made under conditions of mass production, it is important that they be made to conform with standards of fit. Such standards could be set up only if the measurements of thousands of feet could be studied. Shoes must fit exactly if they provide the comfort that we should have in the shoes we buy.

Buying hose. The choice of hose has somewhat less direct relationship to comfort than have shoes, but many girls assure us that hose represent a large expenditure each year. To be a wise purchaser of hose, one needs to know the methods of construction used, the composition and weight of yarn used, and the gauge or relative coarseness or fineness of the knitted fabric. One needs also to know the size of hose desired and the length of the leg.

Fibers used. Silk was formerly by far the most popular of all the fibers used in the making of hose for women and girls. Until a few years ago silk made up almost 85 per cent of women's hose, and cotton made up between 5 and 10 per cent. Then a new synthetic fiber, nylon, was made into hose and put on the market. It was at once well accepted because of its beauty and durability. It became necessary to use not only all of the nylon yarn but also such supplies of silk fiber as were available for war purposes. Hence other fibers were brought into use for making hosiery. Rayon was the most notable of these although cotton hosiery was also promoted. Cotton hose were not satisfactory because they could not be made elastic enough to be comfortable. Rayon hose were much improved both in wearing qualities and in appearance.

In fact, rayon hose now look like silk or nylon hose. They are dull of texture and may be had in various weights. Rayon requires special care, however. A pair of rayon hose, for example, must be allowed at least twenty-four hours to dry after laundering before it is worn again. Rayon is weaker when wet and will not withstand the rubbing of shoes

or the pull of hose supporters unless the fabric is completely dry.

Nylon hose are now, however, the popular choice. They wear much better than silk or rayon of a similar weight. In fact, tests made of the wearing qualities of silk and nylon hose produced by the same company showed that it cost almost ten cents per day for silk hose and four and one-half cents for nylon. Similar comparisons have been made of nylon and rayon.

The high school girl often wears anklets made of cotton, rayon, or wool with her sports shoes. For this reason she is less concerned about the hosiery offered for sale than her older sister is. However, she will need stockings of more than one weight to wear with dress shoes for more formal occasions.

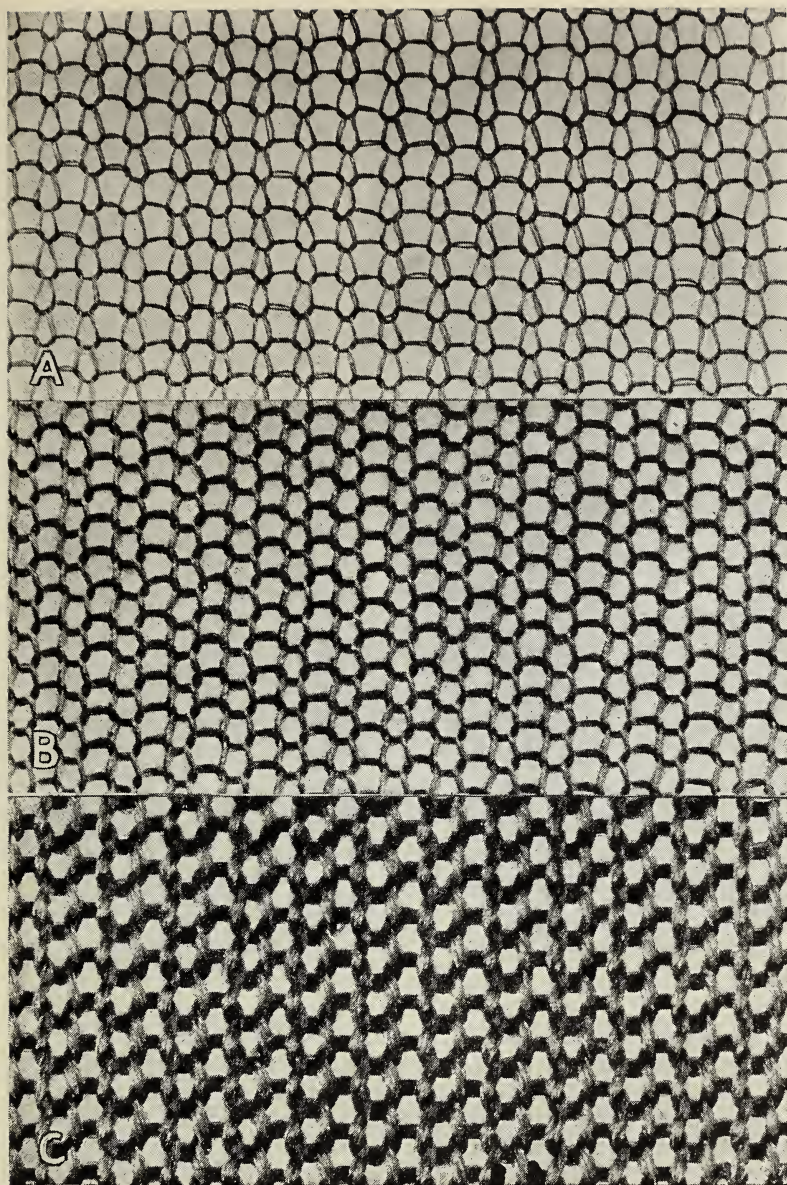
Weight. Hose come in three weights, the weight depending upon the number of strands of fiber used to make the yarn. Hose are usually sold as sheer, semisheer, and service weight.

Full-fashioned hose. What do you know concerning the methods of construction used in making hosiery? Full-fashioned hose are knit flat, with a certain amount of shaping to the foot and leg at the calf, the instep, and the toe. The flat piece is seamed up the back of the leg. Reinforcements are often knit in to insure added strength at the toe, the sole, and the heel. There may be a garter-run stop, consisting of a row of locked stitching in the welt. Provision for ample elasticity at the knee and above is often made by providing a band of especially loosely constructed stitches. In general, full-fashioned hose will be found to fit better and to wear longer than other makes. They usually cost more than semifashioned or circular knit hose.

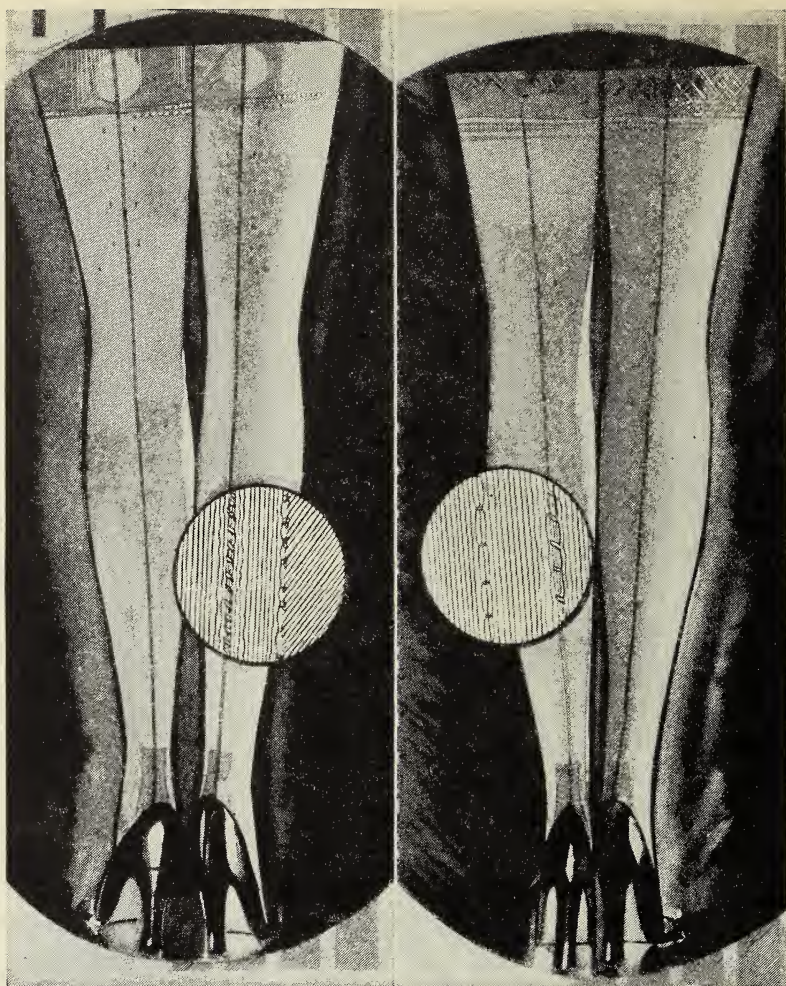
Semifashioned hose. Semifashioned hose are made to seem like full-fashioned hose. They may have a mock seam up the back and a decorative note of drop stitches placed where the shaping is done on the full-fashioned hose. Such shaping as is found in semifashioned hose is done by adjusting the tension of the yarns so as to allow for little stretch at the ankle and a great amount at the calf and at the knee. It is also done by pressing or boarding, which helps to shape the hose. On washing, the lack of fit may appear. The bare legged nylons and rayons are examples of semifashioned hose.

Circular-knit hose. Circular-knit hose are knit in one piece, are seamless, and have as many stitches or loops at the ankle as at the top. The ribbed stockings commonly sold for children are circular knit.

Gauge of hose. Also important in determining the character of the hose is its gauge—that is, the number of needles to each $1\frac{1}{2}$ inches of



The gauge and number of threads should be considered in the choice of hose. *A*: Sheer. *B*: Semisheer. *C*: Service weight.



Sears, Roebuck and Company

The difference between full-fashioned and semifashioned hose is apparent to the interested observer. *Left:* Full-fashioned hose having a seam up the back and "fashion" marks produced by dropping stitches. *Right:* Semifashioned hose having a mock seam and imitation "fashion" marks.

the knitting machine. A gauge of 40 means 40 needles to each $1\frac{1}{2}$ inches, indicating a relatively coarse stocking. A gauge of 51 means 51 needles to $1\frac{1}{2}$ inches, and indicates a fine texture. Usually the finer yarns—those having the fewer threads or strands—are knit on the higher gauges.

Durability of hose. The durability of hose depends upon having yarn of a good quality, well twisted, and heavy enough for the wear to which



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After hose are laundered they should be hung in such a manner that they will not be snagged or subjected to high temperatures.

it will be subjected. It is useless, for example, to attempt to buy durable sheer hose, for their sheerness, which is so much desired for beauty, prevents durability. The practice of buying hose in lots of three pairs in the same color and weight presents certain advantages in matching up the survivors after a siege of runs, snags, and other disasters.

If your hose wear out at the toe, they are probably too small for you. Hose should be bought one-half inch longer than the foot length. If the hose wear through at the heel after a few wearings, it usually means that the shoes do not fit well. Runs starting from the welt of the hose may mean two things: either the stockings are too short or the hose supporters have been fastened below the welt and into the single layer of the stocking. Be sure that you purchase stockings of a length satisfactory

to your need. The average length is 30 inches, but stockings can be had 28 inches long, for the girl of small stature, or 32 to 35 inches long, for the taller-than-average girl.

To increase the durability of your stockings, wash them as soon as possible after each time they are worn. A suds of mild soap and lukewarm water should be squeezed through the stocking to wash them. They should then be thoroughly rinsed and, after excess water is pressed out, the stockings should be rolled in a towel for a few moments and hung over a towel to dry.

Rubbers and galoshes. Rubbers, boots, and galoshes should be bought in a length and width that will easily slip over the shoes with which they will be worn. Thought also must be given to the type of heel the galosh has, if it is to fit over the shoe with which it will be worn. Wide differences in heel type between the shoe and its covering tend to destroy most of the satisfaction that the protection might give. The style of shoe protection selected should be decided upon in terms of the local weather. A five-buckle galosh might not be too high for a girl in the Far North, but it might seem absurd in the open winter weather of Texas or Oklahoma. There are few specific guides to the selection of quality in rubber goods. The guarantee of a reliable dealer remains an important assurance of quality.

That the maximum wear be had from all rubber footwear, it is important that rubbers and galoshes be thoroughly cleaned after wearing. The lining should be dried at room temperature before putting them away, and they should be stored in a cool, dry place away from the light.

SUGGESTIONS TO THE CLASS

1. Examine several pairs of hose of the same size selling at various prices. Compare as to size of foot, length of leg, elasticity at the top, fineness of yarn, and construction. How will you decide what price hose to buy? Can inspection be relied upon to guide your choice?

2. Bring to class a number of pairs of hose for which the weight and gauge are known. Discuss the relative durability of each pair of hose. For what type of service is each hose suited?

3. The next time you buy stockings, buy two pairs alike. Keep a record of the actual number of days' service given you by these stockings. Calculate the cost per day of wear.

4. Calculate the amount of money spent for shoes in one year. Determine the cost for one day. Compare the daily average cost for shoes with that for stockings.



When buying a hat, wear the dress or suit with which the hat will be worn.

5. Select pictures of shoes that illustrate good and poor design. Is the design in shoes toward beauty? Toward comfort?

6. Prepare a poster tracing the evolution of the modern shoe.

7. Have a well-informed shoe salesman discuss with your class the requirements for well-made shoes and galoshes.

8. How shall other accessories be chosen?

We speak of "other accessories" because occasionally shoes, hose, and galoshes are considered as accessories to the costume with which they are worn. There is no hard-and-fast rule about the classification, and most of the articles yet to be considered are, like shoes and hose, an essential part of the completed costume. If you will check over in your mind the articles needed to complete a costume, doubtless you will quickly name hat, scarf and other neckwear, gloves, purse, handkerchief, beads, clips or other costume accent, and possibly, depending upon the weather prevailing locally, rain coats or capes. The great variety in this array of articles prevents one from making general rules, and makes necessary consideration of each individually.

Hats. Hats are made of natural straw, artificial products, such as rayon or cellulose in imitation of straw or other fiber, fabrics, leather,



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Proper care of your hat contributes to your satisfaction.

fur felt, and wool felt. Felts either of wool or fur have a wider sale than any of the other materials because they tend to hold their shape better than other materials. Felt hats are now worn the year around and may be had in any color. Light-color felt hats are often chosen rather than straw hats because a little rain will not cause a felt hat to lose its shape.

Wool felts are usually less expensive than fur felts. Wool for felt consists mainly of fleece wool to which may be added wastes from woolen fabric mills. It is possible to mix cotton with wool to make felt, but at least 50 per cent of the mixture must be wool in order to produce a material that has the toughness of felt. Recently aralac has been

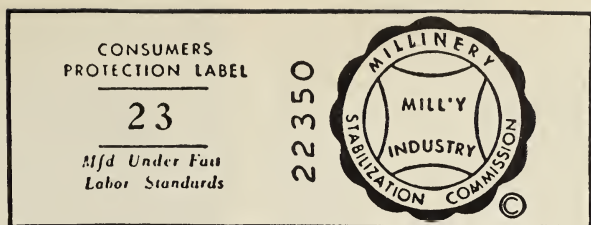
used in the making of felt and a product of good quality has resulted. Inferior felts may be recognized by a stiffness, caused by the presence of certain glue-like substances, and a dusty, dingy appearance that results from the use of filler, a substance other than wool.

Fur felt is made of the hair of rabbit, beaver, or sometimes muskrat. Fur felt possesses greater pliability than wool felt and is more easily kept clean by brushing. If, however, it is not a good quality of felt, holes may be easily torn in the material, even when the brim is grasped to put on the hat. Fur felts are generally more expensive than wool felts.

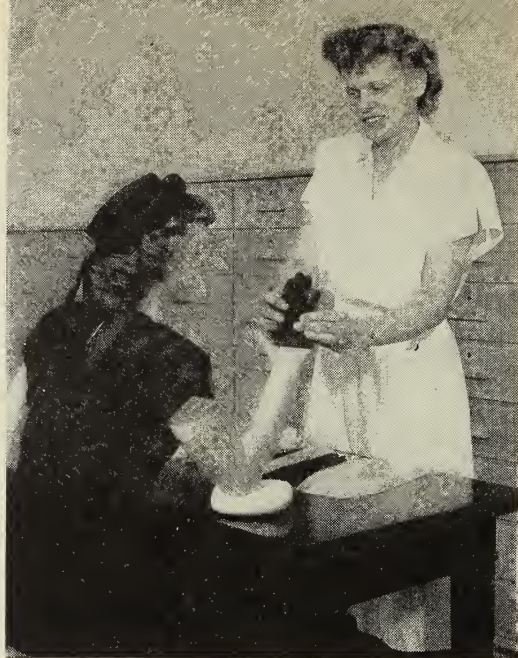
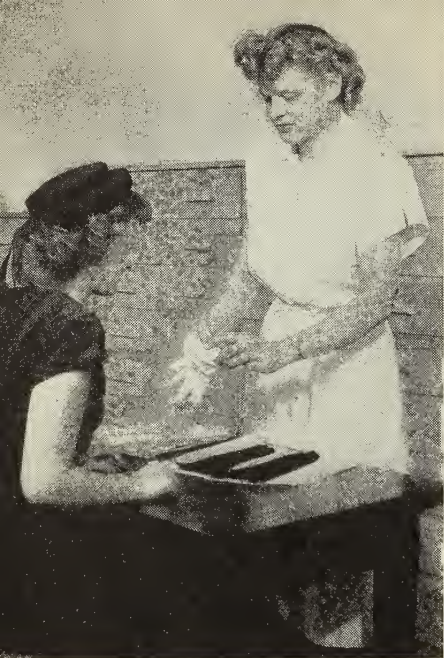
When buying a hat, it is well to wear the apparel with which the hat is to be used. Then it becomes possible to consider the hat as an accessory to a given costume. You can thus carry with you as definite guides to aid in wise selection the idea which you wish to suggest, the color harmony, and the line direction expressed by the costume.

There is an advantage in limiting the number of hats which you are considering to just those that are really suitable for your need. Study these for what they may add to the costume as you stand before a full-length mirror. If you are able to say to the clerk, "I am interested in a dark blue tailored felt in head size $22\frac{1}{2}$ to wear with this suit (or coat) from the hats advertised at \$4.50," you will save her and yourself much effort in trying on hats in shapes, hues, and types totally unsuited to your purpose. Don't try on the tiny dressy hat if you know that the small beret looks best with your sports coat. Or don't waste time trying on the red felt when you know you must buy a blue hat to match other blue accessories.

There are two main points to be remembered when one is selecting a hat. The first is that it must be becoming, adding somehow to your appearance. There are many hats so extreme in style as to be becoming to no one. They are bought because they are supposedly "smart." Often when worn, they seem not smart but queer. The hat must be suited to you, or its purchase should be avoided. The second is that it must be of such quality that it will give reasonable and satisfactory service. A well-



The Consumers' Protection Label assures the buyer that a hat has been produced under satisfactory working conditions.



Left: Gloves should be examined to see that the type of stitching is strong and durable and that the seam is free from weakness. *Right:* Proper fitting is essential to satisfactory service of gloves.

selected hat will hold its shape and retain its "wearability" for the length of time for which it was purchased.

In buying a hat look for the Consumers' Protection Label that is usually sewed inside the hatband. It is your assurance that the hat has been made under fair working conditions.

Gloves. There are gloves suitable for school, sports, afternoon, and evening wear, and they may be had in either leather or fabric. Leather is highly desirable for gloves because it is pliable and tough enough to serve as a protection for the hands. Some people prefer fabric gloves because leather stains with perspiration. Fabrics are also less expensive and many times wash more easily than leather gloves. Wool knit gloves or mittens are the popular choice for school wear.

The fit of gloves. Other points to be considered in the choice of gloves are the fit, the kind of seam used, the kind of lining used, and the fasteners with which the glove is closed. The fit of gloves, like that of shoes, is based on numerous measurements and their interpretation into properly cut pieces that will, when sewn together, produce gloves that fit those measurements. In addition to the standard size, there are cadet sized gloves that have shorter fingers than those of standard. In determining what size glove you need, it is well to take the measures of the right hand as the basis as it is usually at least one quarter size larger

than the left, except in a left-handed person. If the glove is the correct size, the thumb ball will fall naturally into the thumb hole, the fingers of the glove will be long enough yet not too long for the fingers of the hand, and the first button, zipper, or clasp of the glove will come at the joining of wrist and hand, not over the fullness of the thumb ball or hand.

LEATHERS USED FOR GLOVES

NAME UNDER WHICH SOLD	SOURCE	CHARACTERISTICS	DURABILITY	METHOD OF CLEANING
Buckskin	Deerskin from Central America, South America, and Mexico	Soft, porous, warm	High	Colored buckskin is dry-cleaned; the white may be washed
Cape	Sheepskin	Glacé finish, glossy and fine	High	May be washed if so labeled
Chamois	Sheepskin from France	Porous, warm, and supple	Fair	Washable
Doeskin	Sheepskin Lambskin	Soft, velvety finish, and supple	Varies	Often must be dry-cleaned; some are labeled washable
Kid	Young goats Lambskin	Fine leather, quite thin	Fair	Dry-cleaned
Glacé kid	Young goats	Fine, tight grain, thin and flexible, readily shaping to the hand	Not sturdy; suitable only for dress wear	Dry-cleaned
Mocha	Blackhead sheep from Arabia	Soft leather, finer nap and heavier leather than suede	High	Except for a few labeled washable, are dry-cleaned
Pigskin	Central America, South America, Mexico	Soft, pliable, patterned with bristle pricks	Unusually tough	Dry-cleaned or washed

Seams. It has been well said that any place where gloves are seamed is a place of weakness, and it might be added that the weakness is lessened or increased by the type of seam. Seams may be hand sewn, lock stitched, chain stitched, triple stitched, or ripproof. Hand-sewn gloves are relatively uncommon, but pass in and out of our market as fashion dictates. The chain-stitched gloves are perhaps best for dress, and the triple-stitched most desirable for heavy duty or regular wear.

Seams differ in gloves as they do in garments. The common seams are the *inseams*, made by lock stitching the right sides of the leather to-



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Gloves, like other articles of clothing, require good care.

gether and then turning the glove so that no seams are visible; the *outseams*, made by hand stitching or lock stitching with a decorative thread on the outside of the glove; the *piqué*, made as a slightly overlapped flat chain-stitched seam; and the *overseam*, which is made by whipping the two edges of leather together, the over and over of the thread appearing on the outside of the glove. The *piqué* is durable and attractive.

Linings. Linings are often used in gloves to provide warmth. They may be linings of silk, pasted to the leather before cutting; part linings, which are not recommended; or full linings, which are really inner gloves, often made of soft fine wool or fur and attached firmly to the outer glove. There is nothing less warm than an unlined, tight-fitting kid glove in wintery weather. Kid gloves may be made warm enough for winter wear by the use of wool linings.

Fasteners. Glove fasteners include zippers, buttons, and snaps. Some have elastic that holds the glove close to the wrist by gathers or folds.

The tendency of buttonholes to tear and stretch, and that of snaps to pull out or refuse to hold, has caused the popularity of the zipper and the gauntlet glove.

Washable leather gloves. In buying leather gloves it is advisable to look for those that are marked "washable." It must be remembered that these gloves are washable only if handled correctly. Gloves are washed before they are badly soiled. They are washed on the hands in a heavy suds of neutral soap and lukewarm water; then they are rinsed repeatedly in clear water at the same temperature. Finally, they are rolled in a towel to absorb as much water as possible. The gloves should be taken from the towel in a few moments and blown full of air to shape them. Drying away from heat or sun is necessary to keep the leather from becoming harsh. When nearly dry, leather gloves should be worked with the fingers, or "finger pressed" to restore their original softness and pliability.

Glove sizes. Gloves come in sizes from $5\frac{1}{2}$ to $8\frac{1}{2}$. Leather gloves are sold in quarter sizes, that is $5\frac{1}{2}$, $5\frac{3}{4}$, 6, $6\frac{1}{4}$, and so on. Fabric gloves come only in half sizes, as $5\frac{1}{2}$, 6, $6\frac{1}{2}$, and so on.

Purses and handbags. In choosing a handbag or purse we are interested in the color, the material from which it is made, its style, and the conveniences it has to offer. A girl may not carry a purse to school in these days of zippered notebooks with pockets for small valuables. Some, however, prize the compact purse with the zipper closing—the purse that is small enough to fit into the pocket of one's skirt or coat and sturdy enough to stand stuffing. For street wear a more formal design in a handbag is desirable. Girls usually like best a variation of the envelope purse, although other designs have their place also. The vanity with its rigid frame and equipped with coin purse, comb, mirror, lipstick, and compact is also popular with the high school girl. Her older sister is probably better suited with a bag that has several compartments for storage of letters, keys, and other belongings besides a firmly anchored coin purse.

It is wise to check the lining of a bag to be bought for heavy duty use to see that it is of a leather or firm fabric which promises at least fair serviceability. Cording or piping about the edges of the bag itself may provide points of wear, and may lessen the period of satisfactory service of the bag. A plain leather, such as calf or kid, often shows scratches and mars to a greater extent than does a grained leather. Many girls find it good practice to choose bags that are related to the main color harmony of their wardrobes. By choosing their bags with this in mind,



Good Housekeeping Institute

Left: Gloves, handbag, and shoes that are sturdy enough for street and sports wear. *Right:* A soft suede pouch bag, suede shoes, and white washable leather gloves are the accessories worn only for dress-up occasions.

they are able to buy fewer bags, of better quality than would be possible if they stretched the budget allotment over several bags, chosen to be used with this or that dress only. Faddish bags, extreme in style, fabric, or decorative detail, are to be avoided.

Very satisfactory purses are being made of felt or of plastic. Felt has the advantages of not rubbing off and soiling gloves or dress and of being less expensive than a good quality of leather. Suede purses, in particular, are likely to rub off on gloves. Other fabrics, such as corded materials of rayon and cotton, make satisfactory purses also. Wooden and plastic fittings and closings have been devised to replace the metal frames that were previously used.

Patent leather or its substitute, a patent finish on fabric, makes satisfactory purses and is popular for spring wear. White purses should be of washable material so they do not have to be discarded when they become soiled and before they have given a reasonable amount of service.

Handkerchiefs. The handkerchief is chosen as the last important touch to the costume. It must be immaculately fresh, crisp, perhaps gay. Linen is the most satisfactory material for handkerchiefs, but it is expensive and for this reason a sheer cotton fabric, such as batiste or lawn, is being widely used for handkerchiefs—even for the more expensive ones.

A good quality handkerchief is cut along the yarn of the fabric and has straight, even hems. Hand rolled hems are dainty and narrow and are a popular finish for sports as well as regular or evening handkerchiefs. Other edge finishes are hemstitched hems or embroidered scalloped edges. Handkerchiefs for dress occasions are often trimmed with fine touches of handwork, such as delicate embroidery, rows of hemstitching, appliqué, or embroidered initials or monograms. Fine laces are sometimes used also to trim beautiful handkerchiefs.

In selecting a handkerchief it is important to know what fiber it is made of. Also, if the fabric is colored, and especially if it is a print, one should know that the handkerchief is colorfast. This information should be found on labels. If it cannot be obtained, one runs the risk of having to discard the handkerchief long before it is worn out.

SUGGESTIONS TO THE CLASS

1. As a class, visit a millinery store and have the buyer show you felt hats made of fur felt and of wool felt. Compare the price of such hats in similar styles. Can you see the difference in the quality of felt in these hats?

2. Compare a number of hats made of fabric with a group of hats made of straw or felt. Which material shows promise of being most durable?

3. Collect for class study a number of pairs of gloves of different types and made of different materials. Prepare a list of the advantages and disadvantages of each.

4. Study the method of construction of each pair of gloves. Can you identify the seams used? How is the wristline finished?

5. Prepare a demonstration of washing gloves, including preparation for drying and finger pressing.

6. Examine a number of purses, noting the conveniences provided. Can you evaluate the various bags so far as durability is concerned? Does decoration interfere with durability?

SUMMARY

We have studied what should be considered in deciding what garments should be made in the home and what garments could be most wisely purchased ready-made.

If home construction of garments yields personal satisfaction to the maker and wearer or if the choice in fabric is wider than the choice among ready-made dresses or other garments, then there are seemingly reasons for home construction. If time or skill is lacking or if the facilities for shopping are good, there is wisdom in the purchase of the ready-to-wear articles. A decision as to what garments should be con-

structed in the home should be based on one's aptitudes or skills, and one's ability to carry a task undertaken to a prompt and satisfactory conclusion.

Following this discussion, a detailed study was given to our basis of choice for each of the common groups of articles that we buy ready-made—dresses, coats, undergarments, footwear, and other accessories. Although available information is incomplete, it is easy to see that the use of what is known about securing full value for one's money is essential if one would in truth get one's money's worth on the present market.

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Section Three

PLANNING, MAKING
AND CARING FOR
CLOTHING

9

Sewing Equipment and Its Use

Almost every household of today regards the sewing machine as an essential piece of equipment. Not only has the sewing machine lightened the task of sewing in the home, but it has brought about a great expansion of the clothing industries. The manufacture of clothing for men and boys has been taken almost wholly from the home by these industries, and to a large extent the making of clothing for women and children also is done in factories. Our acceptance of factory production has relieved women in the home from long hours of monotonous labor, and has freed children from the strain involved in hand sewing, now believed to be ill-suited to the young child.

The story of the invention of the sewing machine and the later improvement of it is most interesting. The earliest recorded invention for "stitching and sewing" was a machine for bootmaking patented in 1790. A chain stitch was made by a crude stitching device. Although interest in this field of invention continued, practical success was delayed by the difficulty of feeding the cloth by hand. However, in 1830, a French inventor, Barthelemy Thimonier, patented a sewing machine which was used commercially in the making of clothing for the French army. Interesting enough, a mob, protesting the replacement of man power by machine power—a story that is familiar in our own times—destroyed the machine and caused a delay of eighteen years in the mechanization of sewing. Interest in sewing machines on a commercial basis was manifested in the United States as early as 1842, but was markedly increased during the years 1849–1857. Elias Howe, Jr., who had been experimenting since 1843, secured his first patents in 1846. He continued his work and perfected and patented a sewing machine bearing his name in 1857.

Howe's invention provided for forming the stitch by a combination of the eye-pointed needle with the shuttle. It made provision for feeding the material under the needle, but the mechanical device, the baster plate, was complicated and required frequent handling, and for this reason the machine was not generally accepted.

Allen Wilson, working independently, developed and patented a machine that made a lock stitch, had an automatic feed, and was so designed that curved seams and sharp turns could be stitched. The commercial manufacture of this machine developed with rapidity, and numerous improvements were added from year to year.

Although the amount of sewing done in the home may be markedly lessened by the purchase of ready-to-wear coats and dresses, the making of garments, the remodeling of others, and the repair of the wardrobe remain home activities in which the sewing machine is used. This makes it desirable that certain information regarding the performance and care of the sewing machine and its parts become common knowledge.

1. How is the sewing machine operated?

Parts of the sewing machine. In order to be able to use a sewing machine successfully, one should know the parts and their relation to the entire machine. Although various makes of machines vary somewhat, if one has a definite understanding of the parts and their placement for one kind of machine, it is easy to understand the mechanism of other sewing machines. The following parts are essential:

The head is the part above the table containing the stitching mechanism.

The arm is the curved part of the head containing the mechanism for driving the needle and handling the upper thread.

The bed is the flat portion of the head, under which is mounted the mechanism for driving the shuttle and handling the lower thread.

The balance wheel is the wheel at the right of the head driven by the belt.

The bobbin winder is the mechanism for automatically winding bobbins.

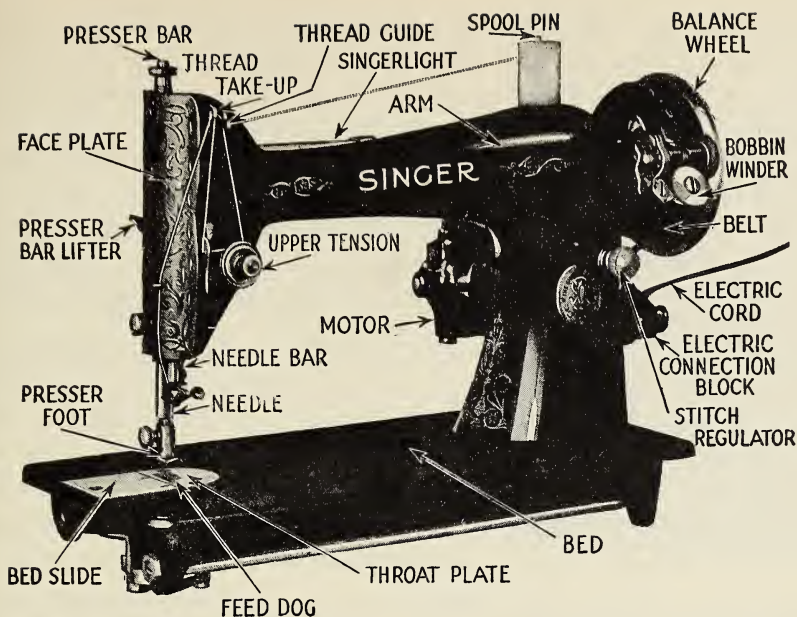
The stitch regulator is the part which controls the length of the stitch.

The upper tension is the means for controlling the delivery of the upper thread from the spool.

The thread take-up is the mechanism which pulls up the slack in the thread and locks the stitch.

The needle bar is the vertical bar to which the needle is attached and which carries the upper thread down through the fabric at each stitch.

The presser bar is the vertical bar to which the presser foot is attached. This



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The principal parts of a lock-stitch sewing machine.

bar is surrounded by a spring which holds the fabric down against the feed dog when sewing, but may be released by raising the presser bar lifter.

The face plate is the vertical plate on the left of the arm which may be removed to give access to the needle bar, presser bar, and take-up.

The throat plate is the plate in the bed directly under the needle through which the needle passes and through which the feed dog projects upward.

The feed dog is the toothed part which projects upward through slots in the throat plate, carrying the fabric from the operator at each stitch. The movement of the feed dog is controlled by the stitch regulator to give the desired length of stitch.

The bed slide is the flat plate or plates at the left of the bed which may be opened to give access to the shuttle or bobbin case and other parts of the lower stitch-forming mechanism.

The shuttle or bobbin case is the container in which the bobbin is placed and around which the loop of the needle thread is passed in forming the lock stitch.

The rotary or oscillating hook is the part which enters a loop of needle thread and carries it around the bobbin case. In the long-bobbin machine this function is performed by the shuttle, which also acts as a bobbin case.

The lower tension is the spring on the shuttle or bobbin case which controls the delivery of thread from the bobbin.

The following parts apply to the cabinet table:

The cabinet work includes all the wood parts of the table, such as drawers, table tops, extension leaf, and the shield into which the head is lowered.

The stand includes all the metal parts of the table on which the cabinet work is mounted.

The treadle is the pivoted platform on which the feet rest and to which a rocking motion is imparted when the machine is operated.

The pitman is the rod connecting the treadle and the band wheel crank.

The band wheel is the large wheel with a groove in which the belt runs, mounted on the band-wheel crank and rotated by the up-and-down motion of the pitman.

The belt shifter is the lever at the front of the band wheel which may be turned to the left to throw the belt off the band wheel. The belt may be replaced automatically by treadling; this is done by a projection on the side of the band wheel, assisted by the belt guide in the rear.

The legs are the upright members which support the table.

The dress guard is the shield in front of the band wheel to keep the operator's clothing from being caught in the wheel.

Operation of the sewing machine. In the operation of a sewing machine the position taken by the worker is important. It must permit the muscles controlling the eyes, hands, and feet to work together harmoniously, with as little strain as possible. If the individual is to be able to work efficiently, her movements and the action of the machine she is using must seem as one. The machine must be placed where there is adequate light, free from glare, and the worker must seat herself at the machine in such a way that the light will fall over the left shoulder and directly on the stitching. Poor lighting not only lessens the possibility of exact work, but also places the worker under a serious and harmful strain.

Position. The position which the worker takes determines to some extent the efficiency with which she works. The tired back and aching shoulders that some persons complain of when they sew by machine are usually caused by the position taken rather than the work done. The chair in which the worker sits should be high enough so that when her feet are placed on the treadle of the machine she finds the position comfortable. The worker should sit erect, squarely in front of the machine, with the ball of her left foot on the upper left corner of the treadle, and the heel of her right foot on the lower right corner of the treadle. The distance that the chair is placed from the machine depends upon the build of the worker. If the distance is too great for convenient arm reach, there will be a strain on the shoulder muscles, resulting in fatigue. If the distance is too small, effective work is likewise hindered. Each

worker must determine for herself the proper distance between the chair and the machine.

Treadling. The motion of the treadle propelled by the human foot furnishes the motive power for the work of machine stitching. The eye must see truly to guide the work, the hand must become skillful in the control of the machine, and movement of the foot must furnish the power of force that operates the sewing machine. The treadling should be free from sudden bursts of speed and abrupt stopping, for smooth treadling is important.

Smooth treadling, like any other muscular activity, is established as a habit only by diligent practice. First remove the belt from the balance wheel and the upper and lower threads from the machine. Then with the right hand give the balance wheel a start in the direction which permits the feed to carry the material. This starting whirl of the wheel starts the motion of the treadle. This motion must be maintained in a flowing rhythm by the movement of the feet. Successful treadling habits have not yet been established if the whirl of the machine indicates in its song any unevenness in its source of power.

Although foot treadling remains the common source of sewing-machine power, sewing machines are available in which electricity has been substituted for foot power. There is no difference between the electric machine and the foot power machine, except the source of power for operation.

There are two general types of electric machines. The one operated with the knee is usually portable and may be placed on a table. The portable machine is seldom found in schools or in the average home, however, it requires little space for storage, and may be desirable for one who lives in a small apartment.

The other electric machine is of the cabinet type and operates by the foot pedal. The foot pedal connects the current with the motor which turns the balance wheel. The electric machine is easy to use but it



Good posture is important when sewing on the machine. Note how the back is straight and the arm rests easily on the machine.

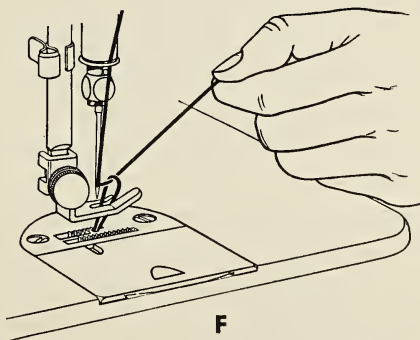
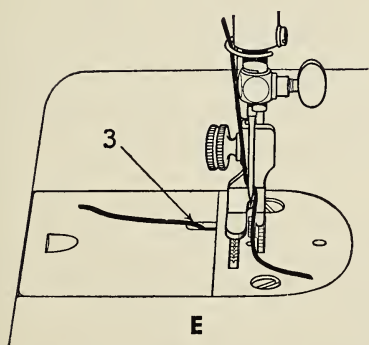
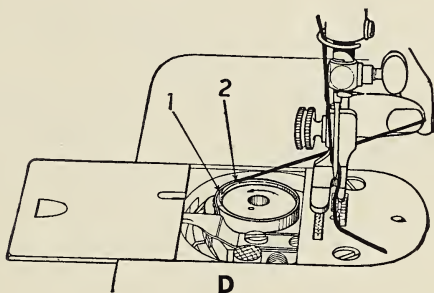
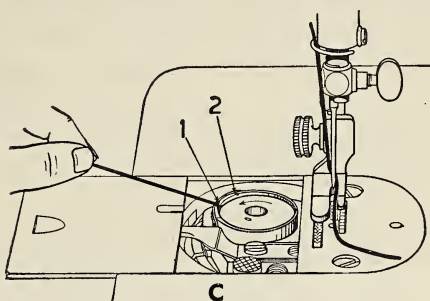
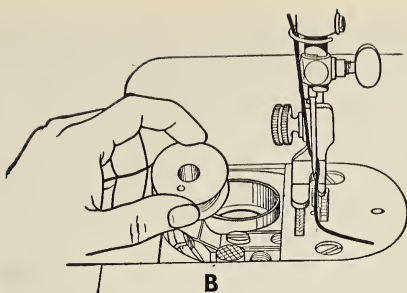
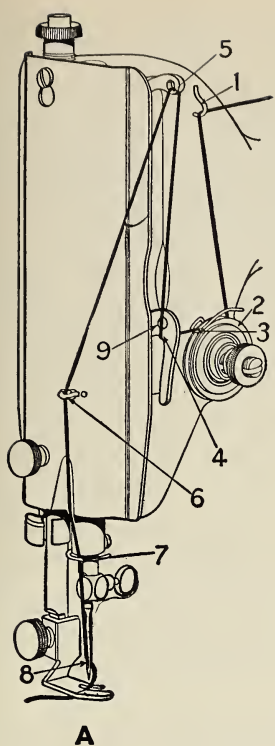


Left: Any home will admire this electric machine as a piece of added furniture. *Right:* In buying a machine, the height of the stool is an item to be considered. Note how well the stool and machine legs match.

necessitates some practice in starting, in stopping, and in determining the best speed to be used.

Threading. Before undertaking stitching, one should know how to thread the machine properly, how to wind and place the bobbin, and how to thread the shuttle case. In threading the upper part of the machine, place the spool of thread on the spool pin which is on the upper right side of the arm, with the thread take-up lever raised to the highest point. Then carry the thread across the thread guide at the upper left of the arm, down the arm to the tension, between the tension discs, going from right to left and under the take-up spring, back and under the slack thread regulator, up the arm, through the thread take-up lever, down the face plate through the thread guide, and then down through the needle, going through from the left side of the needle to the right. Be sure to pull through at least four inches of slack or extra thread.

The bobbin is then wound. First release the balance wheel. To do this, hold it with the left hand, and with the right hand turn the large screw (clamp screw) on the front of the balance wheel toward the worker. Then place the bobbin on the bobbin carrier with the thread coming over the thread guide. Begin treadling as in stitching. Wind the bobbin evenly and smoothly and not overfull. Then place it in the



The diagrams show the threading of one type of lock-stitch machine. *A*: The upper threading. *B*, *C*, and *D*: The steps in placing the bobbin and drawing in the thread. *E* and *F*: How the lower thread is brought up through the throat plate.



An equal tension must be maintained on the upper and lower threads if good stitching is to result. *Top:* Both tensions correct. *Center:* Tight upper tension. *Bottom:* Tight lower tension.

shuttle, or directly in the bobbin case of the machine if no shuttle is necessary. Pull the thread to the back and thread it into place, having at least three inches on the top of the throat plate. Close the bed slide, being sure that the bobbin thread comes through the groove at the side lying next to the throat plate.

For good stitching the upper and under threads should be locked in the center of the material. Poor stitching is often a result of improperly regulated tensions. When the thread lies straight on the upper surface of the material,

the upper tension is either too tight or the under tension too loose. When the thread lies straight on the underside, the tension on the under thread is too tight or that on the upper thread is too loose. To tighten the upper thread, turn the thumb nut of the tension discs to the right. To loosen the thread, turn the thumb nut to the left. The tension for the lower or bobbin thread, once properly adjusted, seldom needs to be changed, and it is not recommended that the amateur attempt to adjust it.

Starting and stopping. Correct habits in starting and stopping the machine are necessary for successful machine stitching. These habits can be formed only by practicing stitching the cloth with the threaded machine. Put the fabric in position under the presser foot. Pull the upper and lower threads so that they extend at least four inches beyond the point of the first stitch, and bring them to the back of the needle so that they are out of the line of stitching. Start the balance wheel with a gentle motion in the direction which permits the feed to carry the material forward, and commence the treadling with a slow, rhythmic movement of the feet. When the stitching has been nearly completed, slow down the foot movement, and at the exact point desired, still the machine by placing the right hand on the balance wheel. Raise the needle, then the presser foot, and draw out the upper and lower threads to a length of six inches. Withdraw the fabric, and cut the threads three inches from the fabric. Skill in starting and stopping can be developed only by much practice in this procedure.

Using attachments. Certain attachments greatly aid in the effective use of the sewing machine. The attachments in most common use include the hemmer, the binder, the tucker, the gatherer, and the button-hole maker. Each of these replaces the presser foot. To use one of these

attachments, first raise the needle to the highest point, loosen the thumbscrew at the side of the presser foot, and detach the presser foot. Then put the attachment in the same position as the presser foot, and tighten the thumbscrew securely.

The position of the attachment may be tested by turning the balance wheel slowly. If the needle goes through the center of the needle hole and the lower thread is brought up, the position is correct.

The foot hemmer is so constructed that just before the edge of the cloth is fed under the needle, two folds are made in the edge of the fabric. The line of stitching is then made on the inner edge of the double fold. The rate at which the cloth is fed into the machine must be uniform, so that the cloth may be kept straight; and the width of the material in the hemmer must be kept constant, so that the hem will be even and entirely free from bunching.

A good way to start the hem is to fold over one-eighth inch of the edge of the cloth for two or more inches, thus making the beginning of the first fold. To make the second fold, place the cloth in the raised hemmer at the point where the first fold ends, and draw the cloth toward you through the hemmer until the two inches have been fed through and the edge is brought under the needle. Place the upper and lower threads in the same position as for stitching, lower the hemmer into position, and begin hemming, controlling with the thumb and forefinger the width of the cloth fed in. With hemming, as with stitching, slow, even treadling is important in securing uniformity in the finished product.

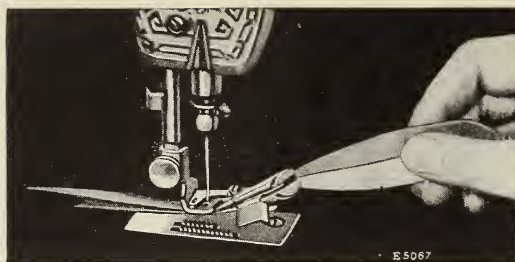
The binder differs from the hemmer in that it provides the means of turning the edges of bias material and attaching it to the edge of a fabric at one stitching. The hemmer provides for one double fold in the fabric; the binder provides for two single folds in the fabric, and for the application of this fabric to the edge of another fabric.

To start binding on the machine, first fold the bias in its center and cut it to a point at the folded edge; then insert the pointed end in the binder, pushing or feeding it through until the pointed end comes



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Making a hem with the foot hemmer.



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Inserting previously folded bias into the folder when using the binder.

through the lower end of the scroll. As the operation of the machine carries the binding through, two single folds are made on its edges. Hold the edge to be bound so that it falls at the center of the scroll. Place the upper and lower threads in the same position as for plain stitching or

hemming, lower the binder into position, and start the machine with a gentle touch on the balance wheel, followed by even treadling.

The tucker is a more complicated attachment than the other two attachments previously discussed, despite the fact that it provides for only the single fold or tuck to be stitched. However, tucks are not used singly, and the tucker must provide a marker for the location of the next tuck, as well as the means for marking tucks of various sizes and in different spacings.

The parts of the tucker are as follows:

The tuck guide, which is adjustable and may be set for any desired width of tuck.

The tuck scale, containing figures which indicate widths of tucks. The tuck scale also acts as a smoother blade, keeping the tucks of uniform width.

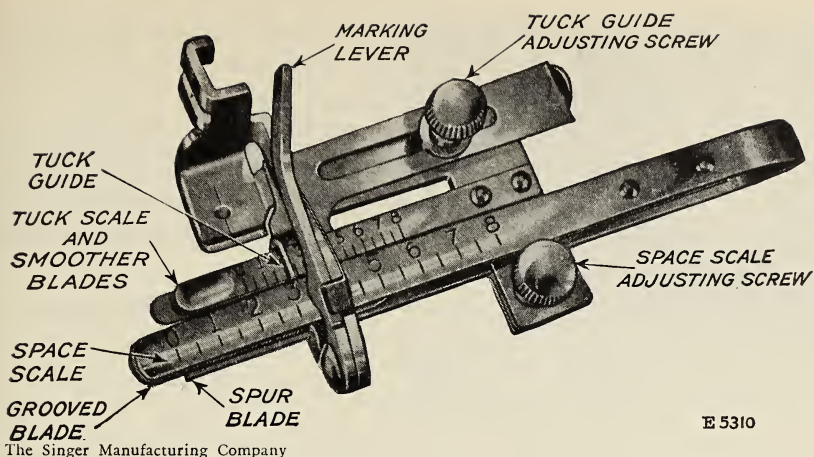
The tuck guide adjusting screw, by means of which the tuck guide may be set at any point on the tuck scale.

The space scale, containing figures on the upper blade which indicate the width of the space between tucks. The middle or grooved blade contains a groove into which the material is pressed by the spur at the end of the lower or spur blade, thus marking the goods for the folding of the next tuck.

The space scale adjusting screw, by means of which the space scale may be set at any desired point.

The marking lever, which presses on the grooved blade, marking the material as it passes between the grooved and spur blades.

The adjustment of the two scales determines the width of the tucks and the width of the spaces between the tucks. The tuck guide should be set over the figure desired—as, for example, either pin tuck or one inch. The space scale provides the means for making the desired space between tucks. If the desired figure is brought into line with the center of the needle hole, correct spacing will be marked. It will be noted that



The tucker and its working parts.

the width between marking on the space scale is double that on the tuck scale.

When the tucker is used, it is necessary to fold and crease the entire length of the first tuck. This fold is placed in the tucker from the left between the grooved blade and the spur blade of the space, and between the two blades of the tuck scale. The fold is brought forward until the edge is under the needle. The presser bar is lowered and stitching is begun. The mark for the next tuck is made by the spur blade as the stitching is done. The fabric is folded on this mark, and the process is repeated until the desired number of tucks are made.

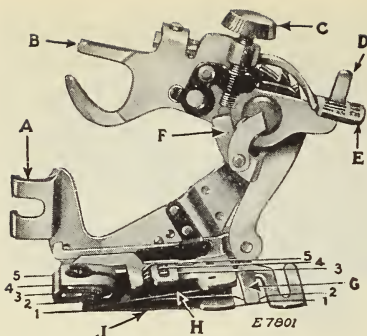
The ruffler or gatherer may be widely used in home sewing. By its use, one may accomplish in a short time a task that would be both lengthy and laborious if undertaken by hand. The ruffler provides mechanical means for pushing more or less material—depending on its set—into a vertical pleat that is held in place by the stitching of the machine. The vertical pleats may be so small as to give only a slightly gathered appearance to the fabric, or they may be definite pleatings, as much as one-eighth inch deep. The parts of a ruffler are as follows:

The foot is the part by which the ruffler is attached to the presser bar. (A)

The fork arm is the section that must be placed astride the needle clamp. (B)

The adjusting screw is the screw that adjusts the fullness of the gatherer. (C)

The projection is the part that projects through slots in the adjusting lever. (D)



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The ruffler and its parts.

The adjusting lever is the lever that sets the ruffler for plain gathering or pleating. (E and F)

The separator plate is the guide on the underside of the ruffler, containing several slots into which the edge of the material is slipped to keep the heading of the ruffle even. (G)

The ruffling blade is the upper blue steel blade with teeth at the end to push the material in pleats up to the needle. (H)

The separator blade is the lower blue steel blade without teeth, which prevents the teeth of the ruffling blade from coming into contact with the teeth of the feed dog. (J)

To use the ruffler, place the material between the separator blade and the ruffling blade, with the edge of the material slightly past the needle, and the presser bar lowered. Then start the machine as in any sewing. As the stitching is done, the ruffling is accomplished. The screw that governs the depth of the push of the ruffling blade can be turned up to lessen the depth of the push, thus lessening the amount of fullness. It can also be turned down, increasing the depth of the push of the ruffling blade and consequently increasing the amount of fullness introduced. The length of the stitch used depends upon the design of the ruffle. A short stitch is used with fine gathers, and a long stitch is commonly desired for larger pleats.

The one-time tedious task of making buttonholes has been made easier by the attachment produced by some sewing machine companies. The attachment fastens on the machine and can be adjusted to make buttonholes from three-eighths of an inch to one inch long. The spacing of stitches, width of stitch, and amount of cutting space can also be varied. While this attachment can be satisfactorily used by the busy person, whose time means much, it does not fully replace the beautiful handmade buttonhole. Before machine-made buttonholes are put on a finished garment, a number of sample ones should be made on a piece of material like that of the garment. The size and position of the buttonholes to be made should be marked with soft pencil or basting stitches before beginning the task. The cutting of a machine-made buttonhole is a particular bit of work and should be done with sharp-pointed or embroidery scissors. One must be careful not to cut any of the stitches making the buttonhole. Full directions for the use of the

buttonholer accompany each attachment. In addition to being used to make buttonholes, the attachment may be used for tacking the ends of plackets or seam joinings where reinforcement is desired.

SUGGESTIONS TO THE CLASS

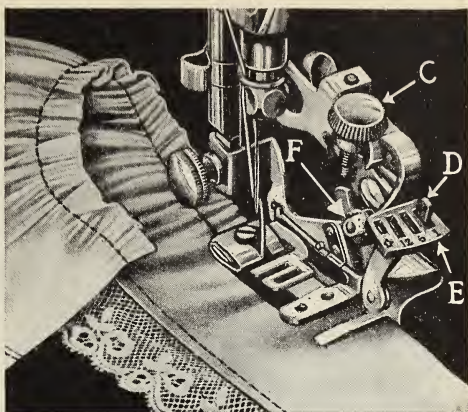
1. Study thoroughly the instructions at hand for the operation of the sewing machine used in your laboratory. Form committees of members in the class, each committee assuming the responsibility for one or more of the following: (a) naming and locating the parts of the sewing machine; (b) demonstrating the correct threading of the machine; (c) showing how the tension may be regulated and the stitch lengthened; (d) demonstrating correct habits of starting and stopping the machine; and (e) demonstrating correct posture at the machine.

2. Practice stitching on paper until you can treadle the machine evenly and start and stop correctly; until you can stitch straight and turn square corners.

3. With the machine threaded, demonstrate on a double thickness of cloth that you can manage the machine by stitching parallel rows and successfully turning corners.

4. Judge the quality of the stitching done in exercise 2, using as a standard a sample which your teacher will give you. Also judge the quality of work, using the best in the class as your standard. Has the correct number of stitches per inch been used? Are the corners square, with stitching alike on both the right and the wrong side?

5. Obtain prices of sewing machines of various kinds. Compare the guarantees firms give as to the period of service for machines at each price level.

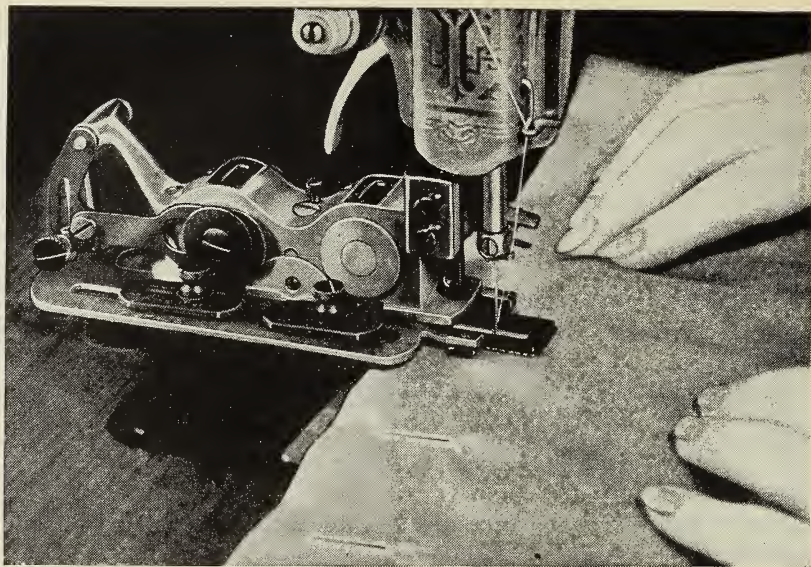


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Making a plain ruffle.

2. What care shall be given the sewing machine?

If the sewing machine is to function smoothly with the least possible cost for its upkeep, it must receive proper care. This fact will be accepted by most people, but not all understand what is included in proper care. Of course, keeping the machine drawers in order aids the efficiency



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The machine attachment for making buttonholes.

of the worker. But no matter how desirable this order may be from a general viewpoint, the condition of the drawers is not of major importance in the care of the machine. The care that matters most is that which is necessary to keep the machine clean and otherwise in good working condition.

Cleaning. The machine should be carefully cleaned before it is used and again before it is put away. Lint and clipped threads may be regarded as dirt and should be removed. Dust collects on the machine as it stands, and although this dust is scarcely noticeable, it may cause caking of the oil, which in turn will bring about many difficulties, and it may further affect the delicate adjustments of a really intricate machine. Threads, carelessly left, often result in damage to the shuttle race and in the blunting of needles. Safety first, last, and always can be obtained only with careful attention to the cleanliness of the machine.

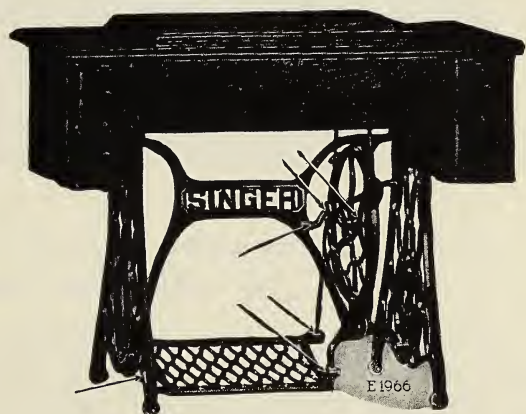
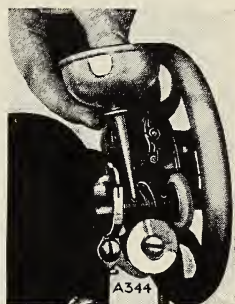
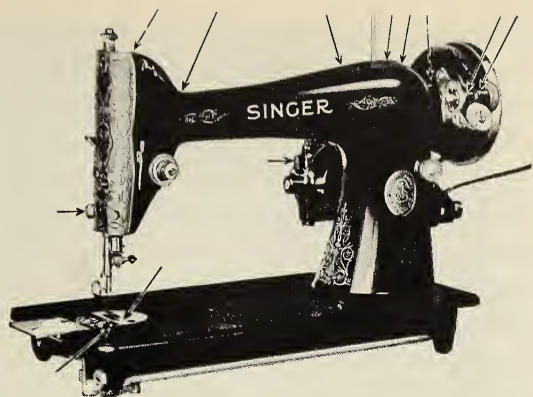
Oiling. Oiling the machine is necessary to keep the parts working smoothly and without unnecessary wear. Only a drop of oil may be required, but that quantity is vital to successful care. Several places on the stand of the sewing machine require oiling. If we consider these places, we find that they include two or more points on the treadle, two points on the wheel crank, and one on the band wheel—all points at which there is friction resulting from contact, and where undue wear would

result if oil were not used. A drop of oil should be placed at each of these points at least once a week.

The head of the machine has many more points at which oiling is necessary. If a more thorough oiling is necessary, the upper thread, the needle, the presser foot, and the face plate should be removed, and also the slide plate, the bobbin, the bobbin case, and the throat plate. The shuttle race should then be cleaned and oiled. In the space from which the face plate was removed are oil holes for the needle bar, the presser bar, and the thread take-up. A drop of oil should be placed in each of these.

Oil should also be placed in the oiling holes of the balance wheel and the bobbin winder, and in any other points indicated on the arm of the machine. All surplus oil should be carefully wiped off, and the machine should be rethreaded and made ready for stitching. It is well to run a sample of stitching before beginning any work on the machine, to make sure that all waste oil has been removed and that clean work is possible.

Some oils have been found to harden when exposed to air. The gummy substance thus produced seriously interferes with the free movement of the machine. To soften the caked oil so that it may be removed,



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Oiling the machine. *Top:* Oiling the head. *Center:* Oiling the bobbin winder. *Bottom:* Oiling the stand.

fill the oil can with kerosene and thoroughly "oil" the machine with it. Then wipe all the parts of the machine carefully, and re-oil them with some good oil recommended for sewing machines.

Repairs. The daily care of the machine includes certain routine attention to it. Any loose parts should be tightened as soon as they are discovered. If repairs are necessary they should be made at once, so that the machine may not be subjected to unnecessary wear. The use of the machine should not be such as would cause it unnecessary strain. The stitching of leather or heavy felt, for example, has been found to create a need for repairs quite out of proportion to the length of the seams stitched. Such stitching may well be sent to the shoe-repair man whose machine is planned for work of that type.

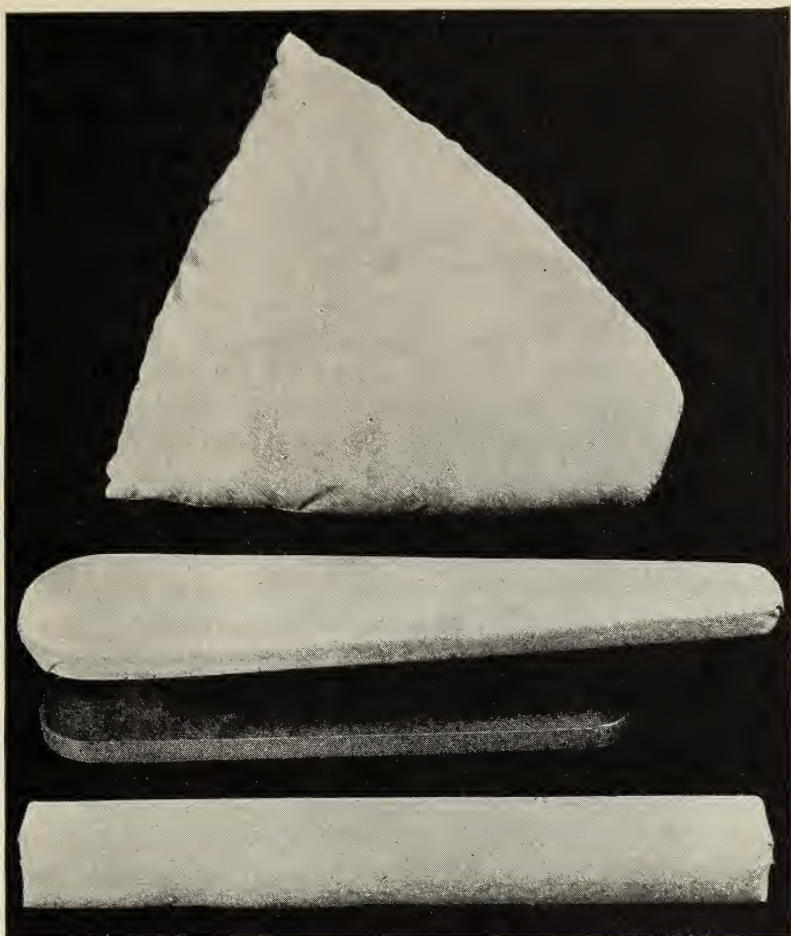
When the machine is put away, the belt should be released, so that it will be free from tension. Several thicknesses of cloth should be placed under the lowered presser foot to remove strain from the presser foot lever. The head should be lowered slowly, and should be securely covered. Care of the machine brings good returns.

SUGGESTIONS TO THE CLASS

1. Examine a machine and locate the places where oil should be applied. How may these places be cleaned before and after oiling?
2. Clean and oil your machine at home, following the instructions given in your text. Check the machine for loose parts.
3. Practice changing the belt on the machine.
4. Practice these operations: (a) placing a needle correctly in a machine; (b) changing the length of a stitch; (c) adjusting the tension; and (d) filling the bobbin.

3. What sewing equipment is needed for efficient work?

Certain equipment of the home sewing room or the clothing laboratory may serve several members of the family or class. Such provisions as the sewing machine, storage facilities, equipment for pressing, and equipment for marking and cutting fall in this class. Equipment of this type may be called general, in contrast to the individual equipment that each person should have. Individual equipment includes shears or scissors, tape measure, tailor's chalk, pins, pin cushion, thimble, and needles. Let us consider first the general equipment to be used in the clothing class, in addition to the sewing machine and the mirrors.



The tailor's cushion, the sleeveboard, and the seamboard are helps in satisfactory pressing.

Doubtless you will be familiar with most of it, but a general survey of sewing equipment seems desirable.

General Equipment. *Storage space.* Storage space for the individual small equipment and for garments in process of construction may consist of a drawer, a locker, or shelves in a closet, supplemented by space for hanging partially finished garments.

Ironing board. An ironing board that is well padded and smoothly covered is necessary in the sewing room. Sheet wadding and other materials especially designed for padding ironing boards are available. They are soft and do not pack with continued use. Unbleached muslin makes a satisfactory cover, although old sheeting is often used. The

cover should be put on entirely free from wrinkles, and should be readily removable for cleaning. If it is possible to have a room specially fitted for sewing, an ironing board which folds into a wall cabinet is most desirable. If the room is temporarily used as a sewing room, the ordinary folding type of ironing board is convenient to use.

Iron. An iron is indispensable in the satisfactory construction of garments. The electric iron suitable for general household use meets most of the requirements of the sewing room.

Tailor's pressing cushion. A tailor's pressing cushion is a firm ham-shaped cushion used in pressing curved seams and darts, such as are found at the shoulder and underarm of a garment. This cushion may be purchased ready-made, or it may be constructed at home. Two oval pieces of firm cotton material, such as heavy, unbleached muslin, form the covering; and wool scraps or soft cotton rags, packed very firmly, provide the filling. The dimensions should be approximately 14 x 18 inches. One end of the oval is shaped so as to narrow it more than the opposite end.

Sleeveboard. A sleeveboard is useful for pressing sleeves and short-garment seams. It is a board about 24 inches long, which tapers in width from 5 to 6 inches at one end to 3 inches at the other. The ends and the edges are well rounded off. Some boards are mounted about 4 inches from a base by means of a wooden bracket. The board is well padded and covered smoothly with unbleached muslin.

Seamboard. A seamboard is used when seams are to be pressed, to avoid making the imprint of the extra thickness of the seam on the right side. A piece of wood about 18 inches long and 2½ inches wide is planed off to produce a half cylinder. The uppermost part of the curve is flattened somewhat. This board is then padded slightly and smoothly covered with muslin.

Chalkboard and tracing wheel. A chalkboard and tracing wheel are used to mark darts, pleats, seamlines, or other construction and decorative lines. Their use saves much time in marking garment parts cut on the fold or when similar pieces are cut for the right and left side of the figure. Chalk lines thus traced can be substituted for tailor bastings where the light-blue chalk line shows up effectively or where the line of tracing does not permanently mark the fabric. They should not be used where the chalk cannot all be removed or where the wheel picks up the threads or cuts the material. It is advisable to test the material on the chalkboard before using the chalkboard and tracing wheel to mark the whole pattern.

A chalkboard can be made of a piece of wallboard about 24 x 30 inches, carpenter's chalk, a piece of coarse bobinette the same size as the wallboard, and strips of gummed paper 1½ inches wide. The chalk is soaked in water to soften it, mashed to remove all traces of lumps, and mixed with sufficient water to form a smooth paste about the consistency of cream. Three coats of this mixture are applied to one side of the wallboard, with time allowed for it to dry between each application. The board should be weighted down while drying to prevent its curling. The net is then placed over the chalk-covered side of the board, and the gummed tape is folded in half lengthwise and glued over the edge to hold the net in place and to finish the edge of the wallboard.

The tracing wheel should be of sturdy construction. The wheel points should be fairly sharp but should not be so thin, that they are easily bent in use.

Yardstick. A yardstick—or what is better, a ruler 48 inches long—is needed for garment construction. It is often used to mark straight lines on the fabric, to hang a skirt or tunic, or to help in placing a pattern accurately on the warp or filling of the fabric.

Tailor's square. A tailor's square is used to establish lines at right angles to each other. It is often more satisfactory than a yardstick for hanging a skirt, because one arm of the square can be placed on the floor or table as the skirt length is marked, thus making it easier to obtain an accurate hemline. The square is convenient for checking pattern measurements, since it is often more easily handled than a yardstick or tape measure.

Pinking machine. A pinking machine or pinking scissors offer a satisfactory means of finishing seams in many firmly woven fabrics. If much sewing is to be done, the use of one of these appliances is advised, since they enable one to work more rapidly than with ordinary scissors. Also, by their use one may produce a more uniform scallop than is otherwise possible.

Individual equipment. *Box or basket.* The individual equipment of each student should include, first, a sturdy box or basket of suitable size to hold the small sewing equipment and the garments being made as classwork. The character of the available storage space must be considered in its choice so that efficient use of available space may be possible.

Scissors or shears. Scissors or shears of a size convenient for use, and made of good quality steel which will hold a sharp cutting edge, are an indispensable part of the sewing equipment. The cutting blades should



Small equipment essential in sewing. A box of silk pins, pincushion, thimble, needles, thread, tape measure, marking pencil, tailor's square, and tracing wheel shown on a chalkboard.

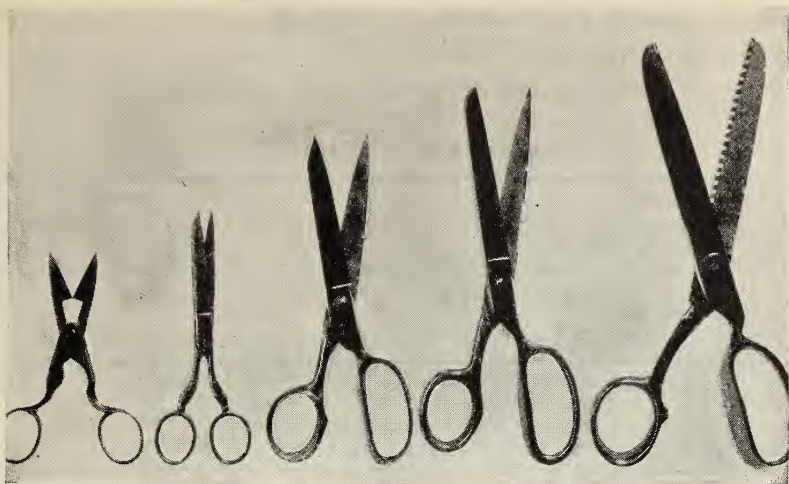
move easily and should be so made and set that they will cut the entire length of the blade.

Shears differ from scissors mainly in that the handles of shears are of different size for each blade, the larger handle allowing for the use of several fingers rather than one, thus providing more force in the cutting process. The handles of scissors are the same size. Shears usually have blades varying from five to twelve inches in length; scissor blades are seldom longer than six to seven inches. Left-handed as well as right-handed shears are on the market.

If only one pair of shears or scissors is to be purchased, a pair six to seven inches long will be found most useful. They should be kept well sharpened and should not be used to cut paper or heavily sized material.

Tape measure. A tape measure used for garment construction should be sixty inches long, made of firm material, and numbered from opposite ends on the two sides. A tailor's square or a T-square is often useful, also.

Tailor's chalk. Tailor's chalk is used to mark construction or design lines on fabric. It is a fine, hard chalk, available in white and colors,



Scissors and shears of various sizes. Note the buttonhole scissors and the pinking shears.

usually pressed into thin rectangular shapes. It marks readily, and in most cases can be easily brushed off. It is well to experiment with the chalk on a scrap of the material before marking the garment, to be certain that a permanent mark will not remain.

Pins. Silk pins are fine, sharp-pointed pins usually put up in boxes and sold by the ounce, by the quarter pound, or by the half pound. The better grade pins are brass with a tin coating. Steel, which corrodes readily, is used for the cheaper grades. The larger pins, such as those usually put up on papers, are too coarse to be satisfactory. Cheap pins are found to leave dark marks in some light-colored or white materials. In such cases, needles or glass-headed steel pins will be most satisfactory.

Pincushion. A pincushion worn on the wrist is convenient when one is fitting a garment, as well as when one is stitching at the machine. A piece of cloth $2\frac{1}{2}$ inches square folded to form a triangle makes a pincushion of a convenient size. The 90-degree angle is formed when the fabric is stitched. Wool and ground cork are good fillings; cotton is not satisfactory. A piece of elastic sewed to each end adjusts the pincushion to the wrist and helps to hold it in place.

Thimble. A thimble made of some hard metal which will not tarnish or discolor the hand is a necessity when any kind of hand sewing is done. Celluloid thimbles are not satisfactory, as they are often thick and clumsy. In choosing a thimble select one free from rough places. It

should be fitted to the middle finger of the right hand so that the tip of the finger almost reaches the end.

A chart of correct thread and needle sizes follows:

THREAD AND NEEDLE SIZES ¹

THREAD SIZES	HAND NEEDLE SIZES	FABRIC AND PURPOSE	MACHINE NEEDLE SIZES	MACHINE STITCHES PER INCH
8 10 12	3 4	For ticking, sacking, canvas, duck.	Coarsest	8
16 20 24	4 5	For ticking, awnings, porch-furniture coverings. For sewing buttons on men's wash clothing and on some underclothing for children.	Coarse	10 12
30 36 40	5 6	For heavy cretonne, men's work shirts. For making buttonholes in, and for sewing buttons on, medium-weight fabrics.	Medium coarse	12
50 60 70	6 7	For sewing materials such as sheeting, cretonne, boys' cotton suiting. Nos. 70 and 80 recommended for general household sewing.	Medium	14
80 90	8	For prints, chambray, and other cotton fabrics of similar weight. For children's clothes, service dresses, aprons, and glass curtains.	Medium fine	16 18
100 120	9	For fine dimity, lawn, batiste, fine rayon, some georgette, crepes and chiffons, and other sheer fabrics. For infants' clothes and dainty lingerie.	Fine	20 22
150 200	10	For fine lace and delicate fabrics. For appliquéing laces and embroideries.	Finest	25

¹ Adapted from reference chart, "Thread and Needle Sizes," published by the Spool Cotton Company, 1930.

Needles. Needles of various sizes and kinds are required for hand sewing. "Sharps" of a size suitable for the thread are used for ordinary sewing. These are of medium length. Milliners' needles, somewhat longer than sharps, are sometimes used for basting. "Between" needles, shorter than sharps, are preferred by some for fine sewing. Crewel needles, or those having a long eye, are designed for embroidery thread, but are sometimes used for general work by those who have difficulty in threading the smaller eye.

Care of equipment. Care must be taken to keep one's equipment assembled and in good condition. Scissors become dull, one's stock of needles becomes depleted, and even tape measures and thimbles have

a way of straying, almost as if they are possessed of powers of locomotion. There is an old saying to the effect that "a workman's tools show the man." One needs to build an interest in and a respect for the equipment with which one works, both for one's own satisfaction and as a means of expressing respect for the rights of others. Have you ever heard the requests, "Will you lend me your shears?" "May I have your tape measure?" Such requests may seem small, but response to them causes someone to stop work to supply the article desired. Later that person must stop again to return the article to her equipment. In addition to this loss of time, there is always involved the question of who is responsible for a dulled or broken blade on shears, or for the loss of a pincushion or thimble.

SUGGESTIONS TO THE CLASS

1. Plan the arrangement of a sewing room that you would like to have in your home. What ideas have you obtained from newspapers and magazines? Which ideas come from observing well-equipped sewing rooms in the homes of your friends? What suggestions would you give for caring for sewing equipment if a room was not provided for that purpose?
2. Plan storage space for the small sewing equipment used in your home; for that used in the classroom.
3. Choose a piece of sewing equipment and write a short story tracing its development.
4. From local stores obtain prices on the equipment listed in this problem. Total the cost to determine what investment is suggested.

4. *Why is the mastery of certain techniques of hand sewing desirable?*

Mastery of any activity requires that one shall have an understanding of all that is involved in the task, and also that one shall have developed skill in the performance of the task so that the product shall show fine workmanship. We think of the nuns of certain convents noted for fine needlework as having mastered the craft. Perhaps we may point with pride to the fine stitches in a quilt or garment made by the fingers of someone in our family generations ago. Few women today attempt to make stitches as minute as those in which women of other years had pride. Machine stitching has removed the necessity of the constant hand stitching by which women of a century ago brought their skill to such high degree. Also, the numerous demands on one's time and the in-

interesting activities open to women have lessened the interest in the perfection of a handicraft. Today women are interested in skills in hand sewing largely as a means of supplementing machine stitching in making garments, or in the alteration and repair of garments.

Posture. Hand sewing, which seems a simple task, really requires a fine coordination of body muscles and presents a challenge in self-mastery. The maintenance of good posture is beneficial to the worker, and when established contributes to ease and efficiency in one's work. Have you ever seen a person trying to sew, sitting slouched down on the base of the spine with the shoulders and upper arms pulled in a tense position in an effort to bring the sewing into an easy line of vision? Early fatigue is the inevitable result of such a position.

A good posture for sewing requires that a comfortable chair be available. The chair should have a shaped seat, so made that the back of the seat is lowered slightly. Such a seat supports the pelvis and thigh bones in a normal position. The depth of the chair seat should be about two-thirds of the length of the upper leg, to avoid unnecessary pressure under the leg. The feet should rest comfortably on the floor. The work table should be high enough so that the forearm rests comfortably on it, bringing the work high enough so that tiresome bending of the shoulders and neck can be avoided. When it is necessary to lean forward, the body should bend at the hip. Slovenly habits of posture may make the soldier-like bearing recommended here seem severe. However, pride in one's work and a desire to give oneself as few handicaps as possible should lead each person interested in sewing skill to work earnestly at the establishment of correct sitting posture.

Fundamental processes. The mastery of certain fundamental processes of hand sewing is an aid to good workmanship. Basic to all hand sewing is clipping the length of thread to be used, threading the needle, tying the knot, holding the needle in proper position, and using the thimble.

Although many people consider the thimble a necessity in doing any kind of hand sewing, to some, learning to use it is a laborious task. Many exercises have been used to aid one in learning to use the thimble. The one given here might be tried if you have difficulty in using a thimble.

1. Make an O, having ends of forefinger and the thumb together.
2. Close the remaining fingers, being sure the O is kept perfectly round.
3. Do 1 and 2 several times, so it is easy to do.
4. With needle threaded, place thimble on third or the thimble finger.

5. Hold needle in left hand between thumb and forefinger (with eye of needle toward the right hand.)

6. Take needle at point with the right hand with fingers in position as in No. 1.

7. Close remaining fingers as in No. 2 and permit thimble to stop so that the thimble rests on eye of needle.

8. With the thimble push the needle through between the finger and thumb.

9. Begin with No. 1 and practice the entire process many times.

10. With a piece of soft cloth about 6 inches square place needle in cloth one inch from edge and take a fourth inch stitch, bringing the needle point to the top and with thimble pushing needle through.

11. Catch the point of the needle with the right hand and finish pulling through.

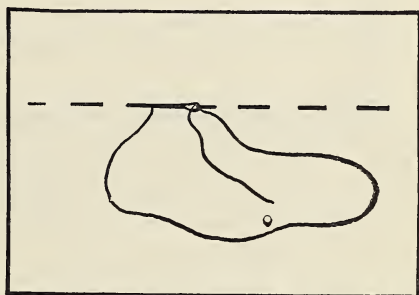
12. With the thimble push the needle down and through the cloth, then to the top again. Let go of needle and catch point of needle with thumb and forefinger of right hand. Repeat several times or until you feel you can use the thimble.

A good exercise is to take several small stitches on the needle before you stop to pull the needle and thread through the material.

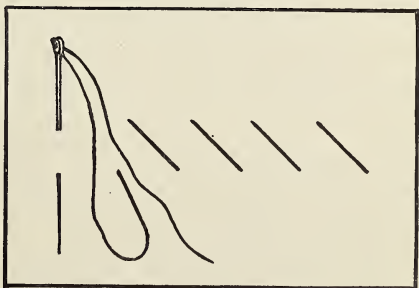
Although you have doubtless already received instruction at home or at school on these points, it might be wise to check your present practices against the accepted standards shown in the illustration on page 328.

If your techniques for the handling of the needle, thread, and thimble have proved acceptable, you may proceed next to review your knowledge of the fundamental stitches in hand sewing.

Temporary stitches. *Basting* is a temporary means of holding sections of a fabric together before it is firmly stitched. It usually follows the careful pinning together of the two pieces of cloth.

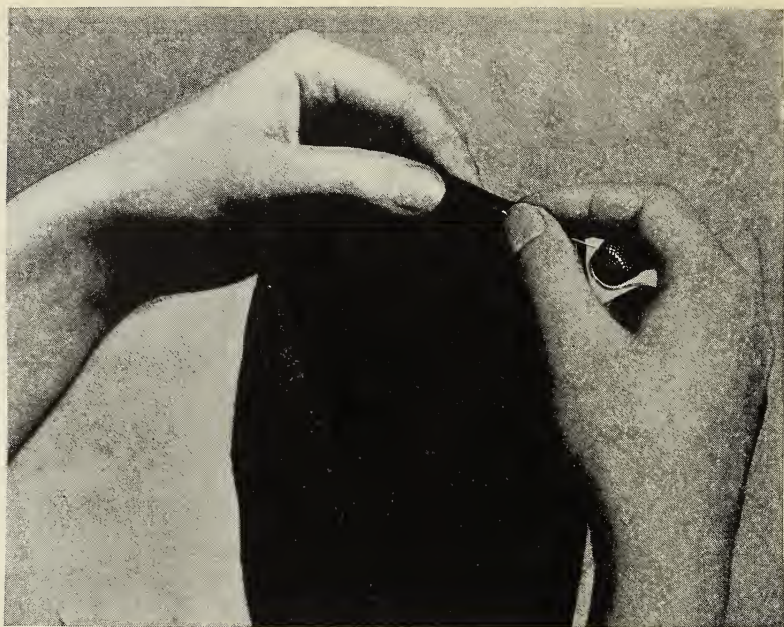


A



B

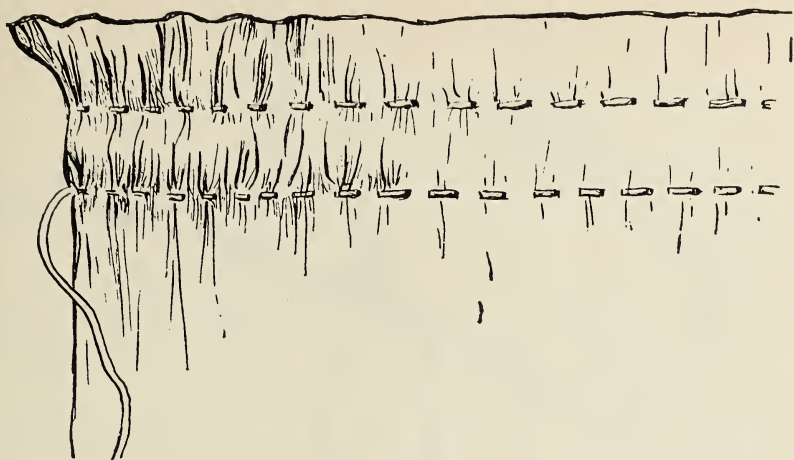
Basting stitches. A: Even basting. B: Diagonal basting.



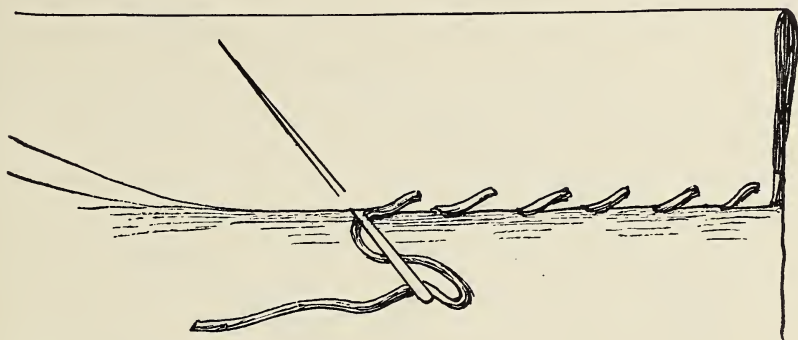
This is the correct position of the hands in making running stitches. Note how the needle and thimble are held.

There are three kinds of basting stitches. Each one differs from the other in the way the stitch appears on the upper and lower parts of the fabric, and in the lengths of the stitches or the direction in which they run. The stitches are described as even, uneven, and diagonal. *Even basting* is really a long running stitch, and shows equal length in stitches and spaces. It is used to hold sleeves in the armscye and in other instances where careful placement is important. *Uneven basting* is a longer stitch with a shorter space between the stitches. Variations of the arrangement of stitches and spaces are often made. Some form of uneven basting with relatively long stitches is commonly employed on long, straight seams. *Diagonal basting* is made by taking short vertical stitches on the underside about one inch apart, the spread then falling into slanting stitches on the surface of the fabric. This is used to baste linings to outside materials, and in general to hold two layers of fabric together to prevent slipping.

Permanent stitches. *Running stitches* are made by taking short stitches of equal length. The length of the stitch determines its strength. They are used in hand-sewn articles in cases where the machine stitch-



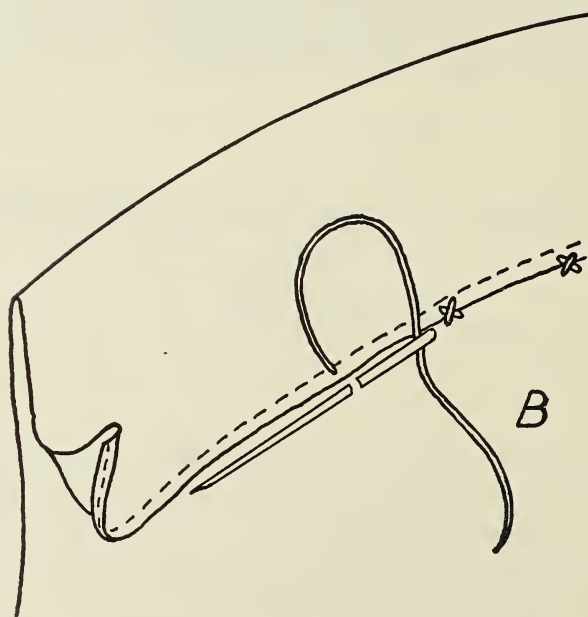
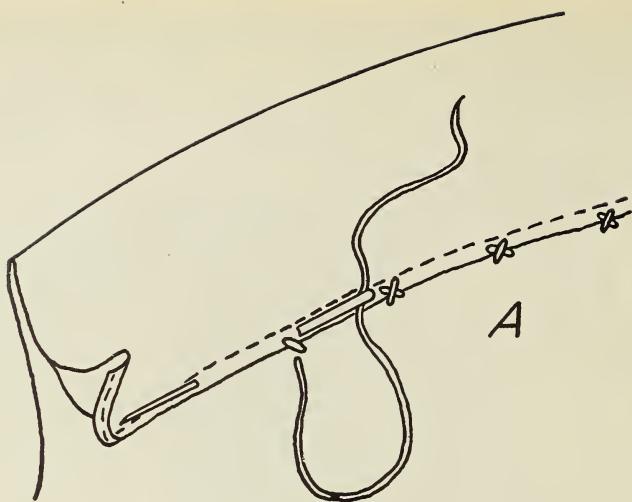
Double row of running stitches.



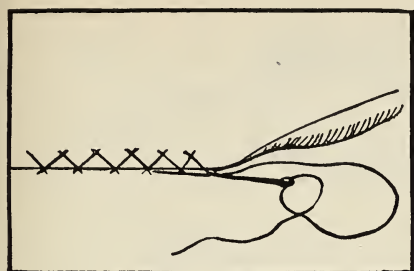
Slant hemming.

ing would stiffen the seam, and in basting sections that need to be held firmly together. The stitching is fastened by taking two or three stitches over each other. Running stitches are made more secure by the use of an occasional back stitch, or one stitch placed over another. A double row of running stitches is used to regulate gathers.

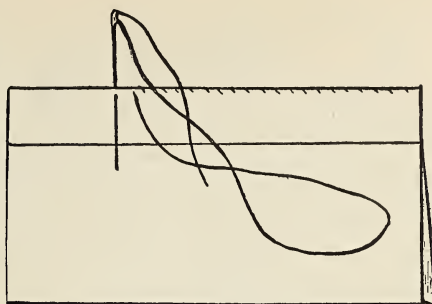
Slant hemming is used to hold in place hems, facings, fells, etc. Each stitch on the wrong side shows a slant. As only a yarn or two is taken up on the right side, the stitching hardly shows. In slant hemming the thread should not be knotted, but when it is pulled through with the first movement of the needle, a short length should be left to be turned and caught under the next stitches. Place the hem over the forefinger



Slip stitch used for hemming. *A*: The needle is carried through the fold of the material to make the next stitch. *B*: The hem is fastened to the body of the garment with a tiny stitch.



The catch stitch.

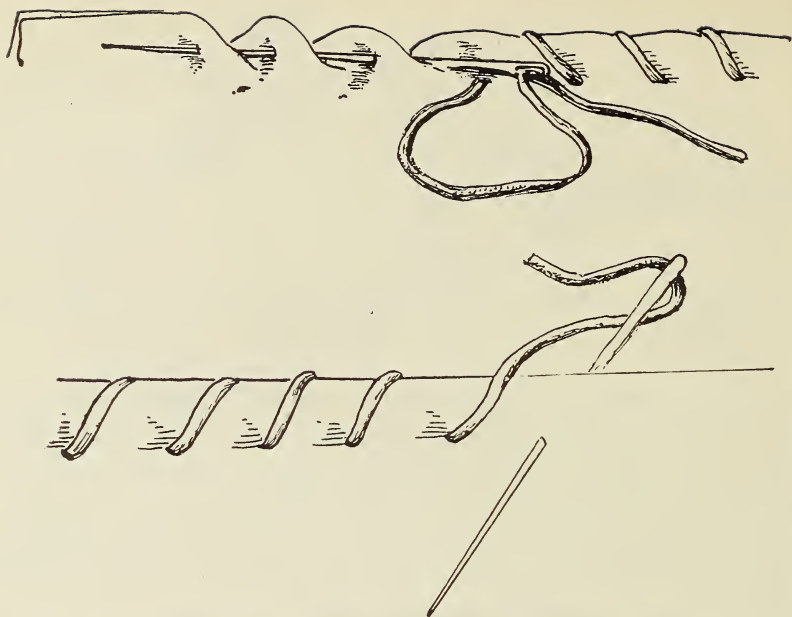


Overhanding.

and hold it under the middle finger of the left hand. Working from right to left, insert the needle under the fold, point it toward the left shoulder, and make a slanting stitch, taking up one or two yarns of the underside of the fabric and of the fold of the hem. Repeat this procedure throughout the distance to be hemmed. Fasten the stitching at the end with two or three stitches taken on top of each other. The stitch for vertical hemming is similar to the slip stitch.

The slip stitch is the best one to use in putting in hems in wearing apparel. It is almost invisible, the covering of the thread lessens the possibility of catching, and the use of a long stitch permits speed in the process. To make this stitch, slip the needle into the underside of the fold of the hem just below the crease that holds the raw edge under, and bring it out on the same line about one-half inch ahead. Take up a yarn or two of the fabric below, bring the needle out, and insert it into the underside of the fold about one-sixteenth of an inch back of where it was last brought through. This last step creates a figure eight in the stitching, which holds the hem in a satisfactory way. If the thread is broken at any time, the hem will not rip out.

The catch stitch is made by taking horizontal stitches alternately on two different lines. The diagonal lines of thread that result from this alternation of horizontal stitching serve as a finish to raw or pinked edges, or to the hem in wool fabric. Unlike most stitches, the catch stitch is made proceeding from *left to right*. The hem is held, fold down, resting on the forefinger. The thread is caught firmly, then the needle is inserted about one-eighth of an inch under the edge of the top of the hem at the left, drawn through, and a horizontal stitch, only a thread or two in length, is taken in the fabric just above the top of the hem and parallel with it. Next, a horizontal stitch is taken in the edge of the top of the hem, in line with the point where the thread was



Overcasting. *Top*: A quick method useful for pliable material, taking several stitches before pulling the needle through. *Bottom*: The needle pulled through at the completion of each stitch.

fastened and about one-fourth to one-half inch from it. It may or may not extend through both thicknesses of the hem. The stitches are alternated on the lines, and spaced at equal intervals. In addition to being used to hold hems in position, the catch stitch is sometimes used to finish seams.

Overhanding is frequently used to join selvages, including lace trimming, and for joining folded edges. Straight stitches are taken close together over and over the edge, care being exercised to take up only a few yarns and not to draw the thread too tightly. If this stitch is done correctly, the seam will lie flat and will be free from puckering.

Overcasting is a slanting or diagonal stitch used over the raw edges of seams to keep the cloth from raveling. The distance between the stitches should equal or exceed the depth of the stitch. The needle is placed in a slanting position, and the thread slants on both sides of the seam.

Checking work. Good standards of work are to be desired by all who attempt to sew. Achievement of this goal entitles one to pride in her task and pleasure in its completion. One may build toward the desired goal by constantly checking one's work and attempting to improve it.

SUGGESTIONS TO THE CLASS

1. Discuss the benefits derived from good posture when sewing.
2. Practice at home the fundamental processes of hand sewing, including basting, gathering, and hemming. Demonstrate your ability to the class.
3. Bring to class garments that may be used as examples of fine workmanship in hand sewing. Evaluate the workmanship in terms of satisfactions derived, time in making, and care required in the upkeep.
4. Try combinations of tables and chairs of different heights that might be used for sewing work. What are the characteristics of a good sewing chair? A satisfactory table?

SUMMARY

Knowledge of the essential sewing equipment is important in its selection, use, and care. Without such knowledge the user will fail to reach high efficiency in her work, will subject herself to unnecessary strain, and will also subject the equipment to unnecessary wear and tear in use.

The sewing machine is the largest piece of sewing equipment. Time spent in becoming acquainted with its parts and its operation is time well spent by the person who will use the machine. Smooth treadling, proper threading, even stitching, and correct habits in starting and stopping the machine all require practice if skill in these operations is to be developed. The attachments to the sewing machine commonly used in home sewing include the hemmer, the binder, the tucker, and the gatherer, each of which replaces the presser foot in use. Successful use of these parts depends upon a knowledge of how they work, and upon sufficient practice.

If the sewing machine is to be kept in good condition, it must be kept clean—that is, free from dust, lint, clipped threads, and excess oil; moving parts must be properly oiled; and loose parts must be tightened as soon as they are discovered. The belt should be released and a thick cloth should be placed under the lowered presser foot when the machine is not in use.

Desirable sewing equipment other than the machine includes such general equipment as storage facilities and provision for pressing, marking, and cutting (excepting the scissors), and such individual equipment as the sewing box, scissors or shears, tape measure, tailor's chalk, silk pins, pincushion, thimble, and needles. One should have a strong sense of property rights in regard to her individual sewing

equipment, so that it may be on hand and in condition when needed.

There are certain techniques of hand sewing that must be mastered if one is to achieve acceptable standards of work. In developing the desired skills, one should accept good standards and check one's work frequently against them, attempting always to improve one's technique.

10

Planning and Making the Pinafore

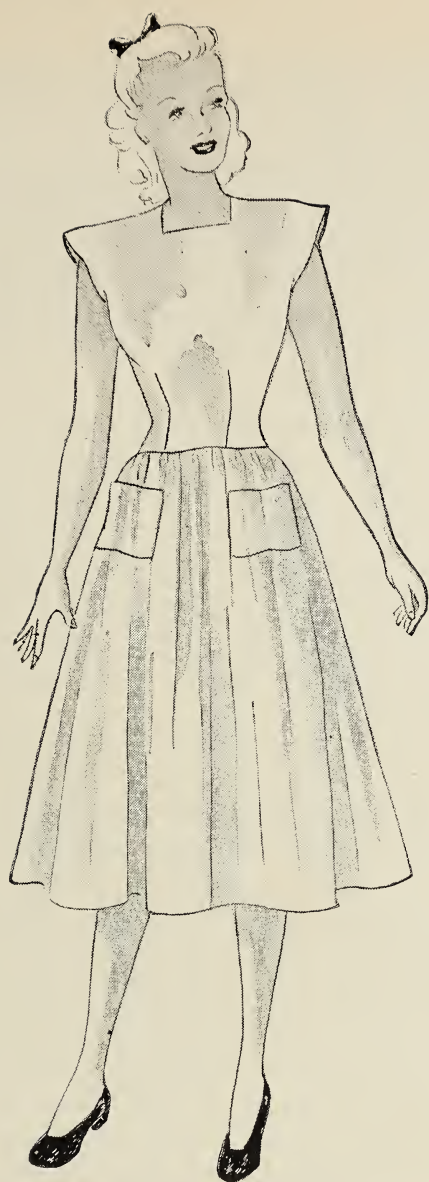
In learning to sew, it is necessary to do simple things first, and proceed to those more difficult as we gain ability to do the simple processes well. The simplicity of a garment when well done, tends to make it something to be admired and gives to the one who has done the work a feeling of satisfaction. The pinafore is a favorite choice of many girls, as it is attractive in appearance and lends itself to many uses. There are several simple construction processes to be mastered, and the pinafore offers a good beginning study of body lines.

1. How shall the material for the pinafore be chosen?

A pinafore suggests a garment that can easily be washed and cared for. For this pinafore you may want to use a plain material, or one of figures or stripes. This will be a matter of personal taste, or it may depend upon the use you expect to give the garment. Material with a small design and having no "up and down" is easier to work with and in the hands of beginners, usually results in the best appearing pinafore. If you choose to use a full skirt, the stripes are easy to handle. Different ideas can be worked out, for example, stripes up and down in the skirt and crosswise in the bodice, or pocket and neck facing made crosswise with the remainder up and down. However, to use a gored



Cotton, more than any other fabric, lends itself to all uses. Note the various garments and the materials used in making.



The pinafore made from plain material.

skirt in striped material presents matching problems which should not be attempted by the beginner. Gingham, prints, percales, and sometimes feed sacks are used in making pinafores. Gingham usually comes in 32-inch widths, while percales are made only in 36-inch widths.

The amount of money you spend for your material will depend upon your needs and desires, as there is a range of price in the various mate-

rials. The cost will somewhat determine the quality of material. This is not always true, as the feed sacks may cost less, and at the same time give good service and appear well.

Among other things one should consider when buying materials is their colorfastness. It is well to purchase colors fast both to soap and water and to sun. Labels on materials will sometimes give you this information. It is always well to ask about such details. Perhaps you will want to give your material tests for colorfastness both to washing and to sunlight. (See page 220.) A firm material that does not ravel or creep in handling is much to be desired.

The small person can wear plain, figured, or striped material. If one is short and "stocky" it is well to avoid large figures or too bright colors. Soft shades and all-over patterns provide a much better choice.

For some, the pinafore may serve as a foods apron; others may use it as a play dress; while still others choose to use it for a cool summer dress. Plain material, either white or a pale color, would be suitable for a foods apron, and prints make good play dresses. When a play dress or the cool summer dress is desired, it may be made from firm, lightweight material, preferably cotton.

The amount of material needed may be determined in the following way: Take the length of the waist, plus two inches, times two, and the length of the skirt, plus four inches, times two. If pockets are desired, they can be cut from the pieces that are left when cutting out the pieces for the waist. In measuring the length of the waist, place the tape measure at the highest point on the shoulder and measure to the normal waistline, adding two inches for seams. For the length of the skirt, measure from the normal waistline to the floor, subtract the number of inches you desire your pinafore to be from the floor, and add four inches. The added four inches allows a one-inch seam at the waist and a three-inch hem at the bottom of the skirt. Some materials shrink a great deal, and allowance should be made for this in addition to the measured length. The chart on the pattern will also tell you the amount of material to buy, but it is well to check this with your own measurements, as you may be taller or shorter than the average girl, for whom the pattern was made.

2. How shall the material be prepared for cutting the pinafore?

Now that the material has been chosen and purchased, there are three things to do in preparation for cutting out the pinafore. First, examine

the material thoroughly to see that there are no flaws. Flaws in the material may be due to poor weaving, weak spots in the thread, or faulty dyeing. When flaws are found, it is well to have the merchant from whom it was purchased make some adjustment. Second, the material must be shrunk unless you are positive it is preshrunk. Third, the edges must be straightened because this will aid in cutting out the garment properly.

If you are to shrink the material, the following steps should be taken:

1. Have a pan large enough to hold sufficient water to completely cover the material.
2. Fill the pan $\frac{3}{4}$ full of warm water and place the material in the water.
3. Leave the material in the water until thoroughly soaked.
4. Take material from water and, without wringing, hang on the line. Be sure the material is hung straight and free from wrinkles.
5. When excess moisture has dripped out and material is partially dry, remove from line and continue the drying process by ironing. When ironing, iron with the thread of material and avoid wrinkles.
6. Fold the material only enough to be able to handle easily, thus avoiding creases.

Shrinking material may be done at school. If this is the case it is well to roll the wet material in a heavy Turkish towel for a time before ironing it.

Straightening the material is very necessary to insure a satisfactory garment. It may be done in either of two ways. A crosswise thread of the material may be pulled from each end and the material cut on the line thus made. After this has been done, the edges at each end may not fold into one straight line. This means that the material needs to be pulled into shape. When material has been torn at each end, it will not be necessary to pull a thread, but you will need to pull the material back to its original shape, which may have been changed when it was torn. In either case, the material is pulled diagonally along the edges to make the threads lie at right angles.

3. How shall the pattern be selected?

There is not a wide variety to choose from when selecting a pinafore pattern. We will want a pattern as nearly like diagram (A) as it is possible to get, but even though different than the diagram, it can, no

doubt, be altered as desired. When it has been decided from the pattern books which pattern is to be purchased, it will be necessary to know the size to buy. The manufacturers of patterns have tables that can be followed as guides in buying the correct size. The tables are made up of standard body measurements. The body measurements are bust, waist, and hip, and each set of measurements will be used under a designated size expressed in years. For example, size sixteen patterns are made for a person with a 34-inch bust, 28-inch waist, and 37-inch hip. The bust measurement alone tells us the size pattern to buy. While the waist and hip measurements of the pattern may not be the same as yours, the alteration necessary is usually quite small and may be made in fitting the garment. The fact that you wear a size sixteen does not always mean you will have the standard measurements. The method for taking the measurements is simple and easy to do. For the bust, place the tape measure over the fullest part of the bust and carry it around to the back, raising it about an inch at the back as it comes from under the arm. The tape measure should be held just tight enough to keep it in place. While your waist and hip measurements are not necessary for buying your pattern, it is well to know how to take them. For the waist, place the tape measure around the waist and hold it in a firm, yet not tight, position. The hip measurement is taken over the fullest part of the hips, which is usually about seven inches below the waistline. This measurement should be taken loosely but not so that the tape measure falls from the hips. Keep the measurements taken to check with measurements on your patterns.

Additional body measurements needed will be those that have to do with length; the length of the waist in front, in back, and under the arm, and the length of the skirt taken in front, in back, and over the hips. In measuring the length for the back of the waist, place the tape at the center back of the neck and measure to the waistline, and two inches below that if you plan to use the lower waistline. For the under-arm measurement, place the tape measure at the center of the arm pit about one inch below the hairline and measure to the waistline, plus the two inches for the lower waistline. For the length of the skirt, place the tape measure two inches below the waistline, measure down to the floor, and subtract the number of inches you desire the pinafore to be from the floor. The back and side measurements are taken in the same manner, using center back and side as the starting point for measuring. These measurements give only the measurements of the finished pinafore and do not allow for seams and hem.

HOW TO TAKE MEASUREMENTS

WIDTH

Bust	Place tape measure over fullest part of bust, and carry around to back, raising it about 1" at the back as it comes from under the arm. Tape measure held just tight enough to keep in place.
Waist	Place tape measure around waist and hold in a firm, not tight, position.
Hips	Take measurement over fullest part of hips, usually about 7" below the waistline. Measurement should be taken loosely, but not so tape falls from hips.

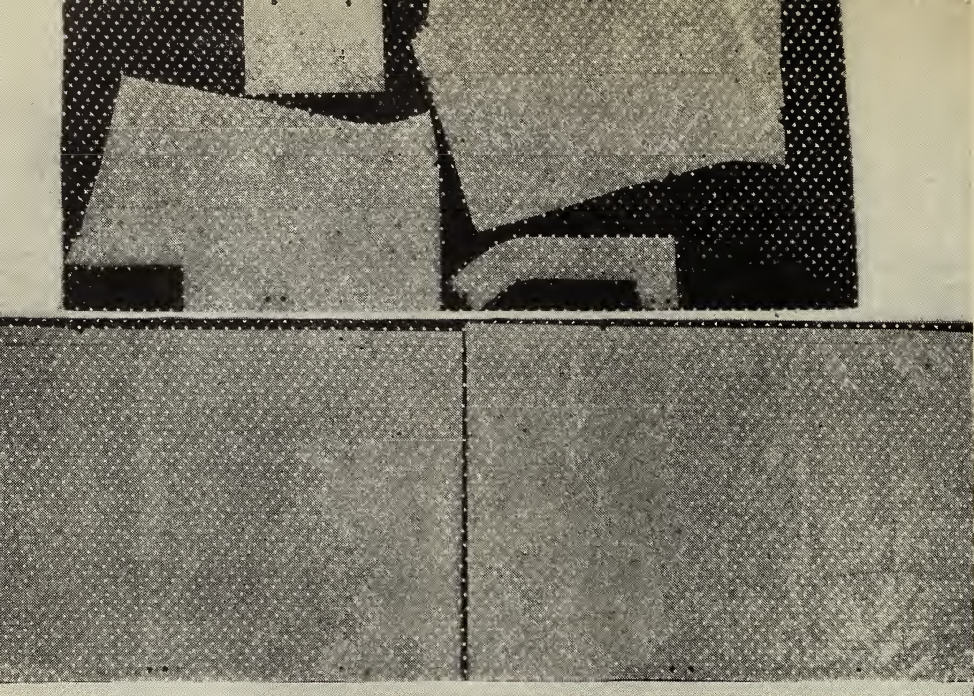
LENGTH

Bodice, back	Place tape at center back of neck and measure to waistline (plus 2" for lower waistline).
Bodice, underarm	Place tape at center of arm pit about 1" below hairline and measure to waistline (plus 2" for lower waistline).
Skirt, center front	Place tape 2" below waistline and measure down to floor. Subtract the number of inches you desire skirt to be from floor. Add 2" if normal waistline is used.
Skirt, center back	Same directions as center front, using center back as starting point instead of center front.
Skirt, side	Same directions as center front, using side as starting point instead of center front.

4. How shall the pattern be laid and the pinafore cut out?

In laying the pattern on the material, place the largest pieces on first. This will permit the use of the leftover pieces, if any, for smaller pieces of the pattern. The guide for the pattern layout will show the best method to use in laying out the pattern. As each pattern piece is placed on the material, pin it securely with the pins perpendicular to the edge and about 6 inches apart. The heads of the the pins should not extend beyond the pattern edge. Study carefully the pattern as you have it laid, and have it checked before doing any cutting.

If the pattern you have chosen is one that opens only to the waist in the back, some adjusting will need to be done. When cutting out the back of the skirt for a gathered skirt, be sure to allow at least three inches of material at each side of the center back. This permits a two-inch fold to be made on each side and provides a one-inch lap which is wide enough to fully care for fasteners to be applied. It is wise to use a selvedge on each side, as this saves turning under the edge. Selvedges on the back of the waist are also advised. It is not necessary to stitch



A suggested way of placing the pinafore pattern on the material.

the selvedge of the material to the skirt or to the waist, as the fold will be held in place by the fasteners.

In cutting out the pinafore, use sharp scissors and cut with as long, even strokes as possible. The only time for short strokes to be used is on a curve. When you come to notches in the pattern, these should be cut away from the pattern rather than following the lines of the pattern. By so doing you avoid cutting too deep into the material.

Extra width may need to be added to finish the armscye line. Allow for a two-inch hem at the outer end of the shoulder seam, tapering this into the width of the underarm seam of the waist.

When all pieces are cut from the material, mark the material with the pattern markings.

5. How shall the material be marked before removing the pattern?

The darts in the pinafore will be marked before the pattern is removed from the material. The place where darts are to be is shown on the pattern by means of round holes or by straight lines. The holes are so placed that if lines were drawn between them they would form

a triangle. The use of the dart is to take out fullness where gathers or pleats are not desired. The dart removes a triangular portion of the material reducing fullness at the waistline, while allowing ample room at the bustline. To mark the place for the darts, tailor tacks are used and will be made in the following way:

1. Thread the needle with a thread twice the usual length and knot the ends together, thus using a double thread.
2. Take a small stitch through the mark, leaving a length of thread about 3 inches long where the needle went into the cloth.
3. Take a second stitch in the same place as the first stitch was taken, and make a loop of three inches of the thread.
4. Take a long stitch to the next point requiring marking, and repeat the process until all markings for the dart are made.
5. When the pattern is removed, the two pieces of material are pulled apart just enough so that the threads from the loops may be clipped, being careful not to pull the threads out.

One may also need to mark in the same manner seam line allowance, hems at the back, and the sleeve hems.

6. How shall the seams of the pinafore be made?

When the pieces of the pinafore waist have been properly basted together, put the waist on and check it for proper fitting. The garment should be loose enough to allow for freedom of body movement and tight enough to follow the body lines and appear neat. Warp yarns of the center front and back should be perpendicular to the floor while the filling yarns at the bust and hip lines should be parallel to the floor. The two places for adjustments on the blouse will be at the shoulder and at the underarm seams. While the gathered skirt does not present a real fitting problem, the side seams and the warp thread of the material should be perpendicular to the floor, and the gathers should be spaced as desired at the waist.

The pinafore is a plain garment, simple in construction, easy to launder, and made from firm, durable material. With this in mind, one will want to use a seam in keeping with these general characteristics. The plain seam is, no doubt, the best choice. It is a seam used on materials that do not ravel easily, and it gives a smooth, flat finish to the garment. The plain seam is made in the following way:

1. Place the right sides of the two pieces of material together where the seam is desired. Keep the edges even.

2. Pin pieces together, with pins perpendicular to the edge. Pins should be about 2" apart.

3. Baste the seam line with uneven basting 1" from the edge.

4. Fasten basting thread by taking two back stitches.

5. Remove the pins.

6. With basted line as a guide, stitch on the machine. To stitch the seams, the sewing machine should be threaded and tested for proper stitching. With the end of the seam to be stitched placed under the presser foot, with seam edges to the right of the foot, and thread ends to the back, lower the presser foot and bring the needle down through the seam line one stitch from the basted line. Keep this distance as you stitch the seam line. Stitch slowly as you near the end of the seam, and stop just at the end of the seam. Raise the presser foot and, with the take-up lever at its highest point, pull the thread out 6 inches from the needle and cut the thread 3 inches from the material.

7. Tie the ends of the machine thread. This is done by pulling both threads to one side and tying them in a double knot.

8. Remove the basting thread.

9. Press the seam flat.

10. Finish edges. For the pinafore, the edge will be finished by pinking, as the material used is firm enough for such a finish. Pinking gives an edge which resembles a saw tooth. To pink the edges either pinking scissors or a pinking machine may be used. In either case, care must be taken not to cut any other part of the garment. After the edges are pinked, the seam should be pressed open.

7. How shall the skirt and the waist be joined?

Since the waist of the pinafore will come an inch or two below the normal waistline, it will be best to join the two parts with a plain seam. The seam may be finished on the wrong side by simply stitching twice, the second stitching being about $\frac{1}{8}$ inch from the first one.

Because the bottom of the waist of the dress is smaller than the top part of the skirt, it is necessary to use gathers. The line of gathering may be put in with the machine. Make the stitches on the machine as large as possible and beginning at the center back, $\frac{1}{2}$ inch below the top edge of the skirt, stitch all the way around the skirt. Another row of stitching, from $\frac{1}{8}$ to $\frac{1}{4}$ inch below the first row, helps to control the gathers. When putting the waist and skirt together, divide each into four equal

parts. With pins fasten together the center front of the waist and the center front of the skirt, and do the same for the back and the side markings. Draw up the gathering threads of the skirt to fit the portion of the waist to which it is to be fastened. When the four parts are in place, space the gathers evenly, pin the material in place, baste it, and stitch it together on the machine. This procedure is done on the wrong side of the garment. Pins and bastings are removed and the seams are pressed.

8. How shall the neck and the armscye be finished?

The construction processes in making the pinafore have been kept as simple as possible. The neck finish involves both straight and curved lines, plus a square corner at each side in the front. For finishing the neck it is well to use the fitted facing which is given with the pattern. It is true that the neckline will not be the same for all people, so it is best to cut the facing after the neckline has been fitted. If changes are necessary, they should be made on the facing before it is cut. Since the pinafore will be open at the back, it may be necessary to add the width of the hem at the back of the garment to each side of the facing. This will allow material to turn under at each side of the back opening. In applying the facing, the two right sides should be placed together with the center front of each meeting. Pin the material in place and baste it using a $\frac{1}{4}$ -inch seam. Stitch it on the machine, remove the pins and the bastings, and clip at the corners to within $\frac{1}{16}$ inch of the stitched seam. Turn the facing to the wrong side, creasing carefully along the line of stitching. Baste along the folded edge to hold the facing in place. Turn the facing under $\frac{1}{4}$ inch at the outer edge and baste. This fold may then be stitched in and the facing may be tacked to the garment with stitches $\frac{1}{4}$ to $\frac{1}{2}$ inch apart using the slip stitch. Remove the bastings and press well.

The finish for the armscye is more simple than the finish for the neck because there is no material added for a facing. The uneven hem is used, which means that a hem one inch wide is turned at the shoulder line and decreases to about $\frac{1}{2}$ inch at the underarm seam. The first turn of the hem is $\frac{1}{4}$ inch wide and the second turn is uneven as described. The hem is basted in place and then is fastened down with the slip stitch as described on page 330.

9. How shall the pinafore be fastened?

Fastenings for the pinafore should be easy to apply, simple to use, and durable. These characteristics are all true of the Gripper fastener, which we will use. In addition, it is rustproof and laundryproof. The Gripper fastener resembles in construction the ordinary dress fastener, but there is no sewing involved in putting one in a garment.

The fastener consists of three parts, socket, stud, and prong. The prong is used to hold the socket and the stud in place.

The following instructions and diagrams will aid you in applying the fasteners.

1. Remove the socket and stud from the card and the prong from the envelope.

2. Place the garment in closed position, that is right side of the placket lapped over the left side, and mark with pins the location for sockets and for the studs down the length of the back closing.

3. Place the prong on a firm flat surface with the five points upward. Place the garment under side down over the prong. (See p. 347.)

4. Press firmly against the fabric over the prong with the eraser end of a pencil until the points are pushed through the fabric. (See p. 347.)

5. Place the socket over the protruding points of the prong so that the points enter the large circular opening on the back of the socket. Place a spool on top of the socket and tap quickly but firmly with a hammer.

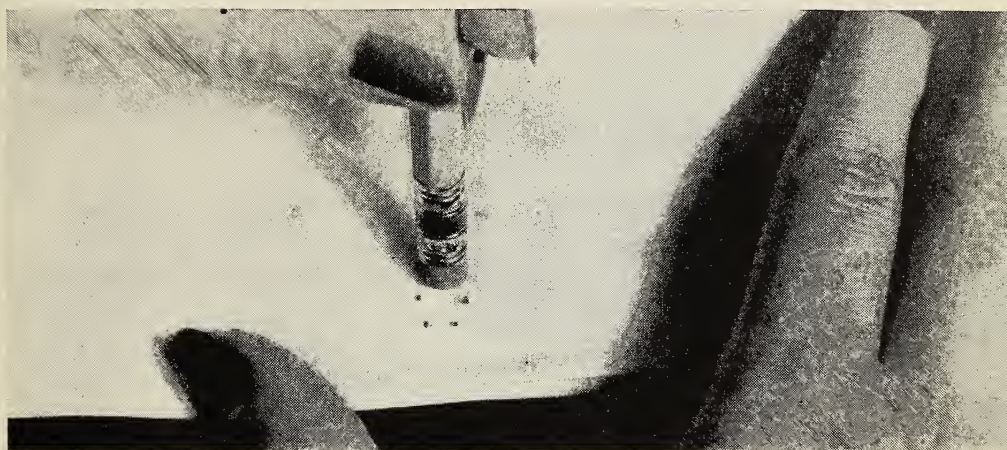
6. Work another prong into the under side of the garment where marked, as in steps 3 and 4.

7. Place a stud over the protruding points of the prong so that the points enter the circular opening in back of the stud. Place a spool squarely on top of the stud and tap, as in step 5.

The parts of the fastener should be attached snugly so that the thumbnail cannot be forced between the socket and the fabric.

When firm material is used, two thicknesses may be enough. However, in many instances it is well to fasten in an additional strip of material. In the garment we are making, this will be easy to do, since the folds of the back are not fastened down at the inner edge. The prong part can be purchased in different colors, and when placed on the outside of the opening, serves as a bit of trimming. In addition to use on pinafores, they have been found to be desirable fasteners for children's garments, certain tailored undergarments, aprons and women's house-dresses.

These fasteners, carefully and securely applied, will give long and pleasing service.



Top: The gripper part of the fastener is ready to have the upper part of material fastened to it. *Center:* The points of the fastener are pushed through the material by using the rubber portion of a pencil. *Bottom:* A spool is placed over the upper part of the fastener and, by means of a firm tap of the hammer, the prongs are fastened into this part.



Good posture and careful measuring are essential to a satisfactorily made hem line.

10. How shall the hem be put in the pinafore?

The general appearance of a garment may be somewhat spoiled by having a poorly made hem. The garment for which the hem is to be measured should be well pressed and fastened just as it is to be worn.

A hem should be inconspicuous, scarcely showing on the right side of the garment. The hem of a skirt should be of equal distance from the floor at every point on its edge line. Obtaining an even hem is best achieved by having the one for whom the garment is designed put the garment on, adjusting it to the correct position with the belt in place. She should stand erect on both feet with her weight well balanced and arms hanging loosely at

the sides. A T-square is placed with the short arm firmly on the floor and the long arm resting lightly on the skirt. A line is established by measurement of the desired distance, as 12 inches or 14 inches from the floor, at 4-inch intervals around the bottom of the skirt. The measurements are taken by a person who moves and shifts the position of the T-square as often as necessary to complete the circle of the skirt. The measurements are marked, as taken, by the insertion of pins parallel to the floor, or with chalk. The procedure from this point is as follows:

1. Remove the garment, and change the pins where necessary to make the lower edge of the hem an even curve.
2. Turn the hem to the wrong side of the material, baste at the lower edge of the hem, and pin in place at the upper edge of the hem.
3. Try on and make necessary alterations.
4. Trim the hem evenly.
5. Pin the hem at seams, center front, and center back.
6. Adjust extra fullness by means of a gathering thread or tiny pleats so that the hemline forms an even curve; turn the edge under $\frac{1}{4}$ inch; machine stitch $\frac{1}{16}$ inch from the edge.

7. Baste the hem in place, press it, and stitch it in by hand, using the slip stitch, the catch stitch, or slant hemming. (The methods for making these stitches are given on pp. 329, 330, and 331.)

8. After the hem has been put in, remove bastings and press.

11. How shall the pinafore be pressed?

The pinafore is an easy garment to press. Since it does not have sleeves or a collar, it can be pressed with putting it on the ironing board only once. Beginning with the right side of the opening at the back, press the length of the waist, and continue around the waist until it all has been pressed. Be sure to give special attention to hems with fasteners, hems and facings of sleeves and neck, and seams of underarm and shoulders, which should be pressed open.

For the skirt, begin again at the right side and press the length of the skirt. Follow around the skirt, giving special attention to hems with fasteners, seams, and the hem at the bottom. When satisfactorily pressed, hang the garment on a hanger.

12. How shall the pinafore be judged?

There is much to be gained from a careful examination of a garment which we have made. We see the things we have done well and the places where much improvement is needed. When judging a garment, there are two ways of viewing it, one when it is on the wearer, and one when we truly examine the workmanship. In the first instance, there are two main things one will see, color and fit, which can be classified under the heading of general appearance. In the second case, one will examine the workmanship in seams, neck finish, armscye finish, gathers, hems, and pressing.

A score sheet similar to the ones used in magazines to test your knowledge on various subjects will be used for the pinafore.

Check through your score card and if the statement is true of your garment, put a plus sign under the *yes* column in the proper space. When you have scored the entire pinafore, add the number of plus signs and that will be your score. A perfect score is 32. If you have between 29 and 32, you have done very good work; between 24 and 28 indicates that some points can be improved upon; and between 18 and 23 indicates the work is below average and that much time should be

SCORE SHEET FOR PINAFORE

Yes

General appearance

- Color suited to wearer.....
- Hemline even.....
- Neck lies flat.....
- Fits body in general.....

Seams

- Stitched straight.....
- All bastings removed.....
- Seam allowances even.....
- Pinked evenly.....
- No thread ends showing.....
- Well pressed (open).....

Neck

- Even width of facing.....
- Seam at edge creased evenly.....
- Even stitches at inside edge.....
- Well pressed.....

Armseye

- Properly hemmed.....
- Stitches even.....
- Well pressed.....

Gathers

- Properly placed.....
- Evenly spaced (not "bunchy").....

Joining of waist and skirt

- Even stitching.....
- Seam properly finished.....
- Even distance from bottom of skirt.....

Fastenings

- Well chosen.....
- Evenly spaced.....
- Even from edges.....
- Applied in proper manner.....

Hem at bottom

- Even width.....
- Fastened down in correct way.....
- Even, well-made stitches.....

Pressing

- Seam open.....
- Free from wrinkles.....
- Hems and facing smooth.....
- Total score.....

spent in practice. Any number below 18 would mean that the work was very poor and no doubt should be done over. It might mean that you are not ready to proceed with the next unit of work.

For each item to which you could not give a plus sign, write a statement explaining why it was not good and telling how it may be improved the next time.

SUMMARY

In the unit we have just finished, you have learned about some of the body lines and their relationship to the pattern you had chosen. The commercial pattern was carefully studied, both from the standpoint of buying and using. How to choose material in relation to the use to be made of the garment was carefully analyzed and much consideration was given to the development of good standards for actually making the garment.

To know when the work has been well done has been carefully set up, and so each individual may judge her own garment.

11

Planning and Making A School Dress

It is an interesting pastime to watch women and girls make choices of designs for dresses and other garments. Leaves of the pattern book are turned over and over with marked indecision. It is oftentimes the opinion of the clerk that makes the final choice. No doubt many of these girls have little or no idea of what is needed or desired in a dress. Their satisfaction in the garment will no doubt be less than if they had made the choice from their own knowledge and desires. Such marked indecision is usually reflected in many ways. It is through study and observation that much knowledge can be gained to aid one in making decisions.

1. How shall the material for the school dress be selected?

In the study of materials we learned many interesting facts, and now we will have decisions to make in regard to our choices. No doubt the first question to ask oneself is, "What service do I expect and need to get from the dress I will make?" Next, "How much money can I afford to spend for this dress?" In fact, if we listed the items to be considered, we would find they could be divided into two classes. One would include those matters concerned with the wearing quality of the fabric; the other would include those qualities which appeal to our

taste. In the first list would come the durability of the fabric, including the permanence of the color and finish and the ease of care. In the second list would appear the style or modishness of the fabric, the popularity of design, the fashionableness of the color, and the price demanded.

For some, cotton will seem to be the wise choice, and for others it will be rayon. In either case it is probably well to choose material that can be laundered. Practically all cotton material is washable, but this is not true of rayon. You will recall that some rayon presents problems in pressing or ironing.

The amount of material you will need to buy will be governed by your choice of pattern. Therefore, your pattern must be selected before buying your material. Visit the stores and select samples of cotton or rayon that you would like for a dress. On these samples use some of the simple tests you have learned to determine the serviceability of each fabric.

You will be particularly interested in knowing whether or not the material is colorfast, whether or not it shrinks, and if it shows such slippage that the yarns will spread apart if strain is put on the fabric. Does the fabric fray easily?

SUGGESTIONS TO THE CLASS

1. Collect some labels that give information as to the finishing processes used on cotton.
2. Plan how much money you can spend for your dress.
3. Examine some rayon samples and test them to find out if they will wash.

2. How shall a pattern be selected?

The simple, sleeveless pinafore was selected because, although it had few fitting problems, it gave excellent experience for developing certain sewing techniques. You are now ready to choose another pattern. This pattern will have some new problems, and you will learn more about commercial patterns as well as additional construction problems.

Experts in garment designing sometimes prefer to work directly in fabric, cutting, pinning, and fitting it directly on the figure without the use of a pattern. This requires unusual skill and often a great deal of experimenting. Those of us who are not experts will do well to make use

of one of the commercial patterns that may be bought in our local stores.

Services offered by a pattern. Careful study of a commercial pattern shows that on the outside of the envelope and on the instruction sheet contained in the envelope there are a number of important helps. Pictures of the garment showing how the design may be varied and giving suggestions for combinations of fabrics are nearly always given. Sometimes a list of the fabrics suitable for use is included, as is a list of "findings" or those notions necessary for making the garment. The amount of material needed to cut the garment and the width of the skirt at the hemline are always given. Within the envelope will be found a tissue-paper pattern for each part of the garment and a guide sheet giving directions for cutting, putting the parts together, and finishing the garment. Some patterns have seam allowances marked directly on the pattern; others state the allowance on the guide sheet. Sometimes detailed directions are included for making such changes in the pattern as are necessary to take care of differences in body proportions. The great care with which all these details are worked out leaves us wondering how so many helps can be provided when the pattern sells for such a relatively small price.

Why price varies. Whether one pays fifteen cents or several dollars for a pattern, it is well to know what the money is spent for. The highest prices paid for patterns bring to their purchasers garment designs that are exclusive and patterns that may be cut to fit individual proportions. Relatively few people buy such patterns, and these are not in the true sense commercial patterns. When we speak of commercial patterns, we mean those sold in regular sizes and at prices varying from ten cents to a dollar. There are a number of makes of patterns that sell for a low price that are satisfactory, and garments made over them fit well. The designs shown at the lower prices are usually simple. Patterns that are more expensive are often for garments more elaborately cut and representing high style. These are intended for persons who have the skill to make a garment that is intricately cut, and who also have the necessary appreciation of line to value properly the work required. A low-priced pattern may not be an economical one to use if the garment made over it is not satisfactory. Some people find the more expensive patterns a real economy because they fit better and give a feeling of satisfaction to their users.

Simplicity of line and detail. Among the first considerations in the choice of a pattern for a school dress are that it is simple in line and detail, easily made, easily laundered, suitable in design to the wearer

and to the fabric selected, and in line with current fashion. A garment simple in line is relatively free from pleats, extreme flares, and intricate and unusual designs. The design may well be conservative, yet in keeping with the mode. Conservative designs, in general, tend to remain in style longer and to be better suited to daily wear than those that are more extreme.

The construction lines usually found in a tailored dress are recommended for a cotton garment. A garment based on such lines is easier to make than one based on complicated curved or diagonal lines. If the shaping of the fabric to the figure depends upon intricate cut, the resulting garment is likely to stretch or pull out of shape in laundering.

The pattern chosen should have as few pieces as possible, and should be as simple in line as is consistent with a dress of pleasing appearance. The instructions on the guide sheet should be simply stated, and the construction processes called for should be such as are suited to cotton fabrics.

In planning the details of the dress, it is well to eliminate all those that have been found poorly suited to laundering. Fasteners that lose their hold under the pressure of the iron, buttons that snap off in the wringer, buckles that break or rust, and bows that tend to become shapeless masses are liabilities instead of assets in a cotton garment. In fact, much consideration must be given to the fact that a cotton garment is usually cleaned by laundering. The seams and finishes must be durable and must be such that they can be kept in a satisfactory condition by laundering. Knife pleating that cannot be restored by ordinary means after washing and numerous ruffles are both out of place in a design for a cotton dress.

Pattern size. As a result of a study made recently of the body measurements of thousands of children between the ages of four and seventeen years, standards for sizes of garments and patterns have been set up by the U. S. Bureau of Standards. A number of pattern companies have adopted certain of the recommendations made for the sizing of children's and misses' patterns. One is that the sizing of garments be based upon a height and a girth measurement, rather than to designate a size in terms of age. The use of an age designation still is made; but for each size expressed as an "age," there appears a corresponding bust, waist, and hip measurement and a measurement from the socket bone to the floor. The chart on pages 356 and 357 shows the measurements in inches that correspond to a size expressed in terms of age, as 12, 14, 16, and so on. There are a number of other measurements that should be stated on the pattern in addition to these. For example, it is desirable

that we know how wide the pattern is through the chest or across the back and how long the center front line is from the neck to the waistline. It is a well-known fact that all girls who need a size 14 pattern do not measure the same number of inches from the neck to the waistline. Yet the pattern manufacturers have not yet seen fit to tell us just how much their patterns measure on this line.

Junior misses' sizes begin with size 11 and continue for each alternate year through 17. Misses' sizes range from 10, 14, and so on to 20. Sizes of patterns for adults are designated according to bust measurement, beginning with size 32—which means the pattern is 32 inches around the bust—and ranging through 34, 36, and so on to 56.

In choosing a pattern of the correct size, it is important that one be well acquainted with the actual measurements of the pattern at bust, waist, and hips and compare them with one's own measurements. If a skirt pattern is being selected, it is good procedure to buy a size that corresponds with one's hip measure, even if the waistline is too large. It is relatively easy to seam-out the extra fullness from the hipline to the waist. The splitting and spreading necessary to add to the hip measurement if the pattern is too small is a much more difficult process. Therefore, buying a pattern that is too small in the hipline is to be avoided when possible. If one is buying a dress pattern, it is perhaps better procedure to buy one that is the correct size through the shoulders and bustline, even though the skirt may need some changing.

CHART OF MEASUREMENTS FOR DIFFERENT PATTERN SIZES
GROWING GIRLS' AND JUNIORS' SIZES

SIZE	BUST	WAIST	HIPS	SLEEVE	BACK MEASUREMENTS	
					Neck-Waist	Neck-Hem
10 years	28	25		20 $\frac{1}{8}$	12 $\frac{3}{4}$	39
11 years	29	25 $\frac{1}{2}$	32	20 $\frac{3}{8}$	13 $\frac{1}{8}$	40
12 years	30	26	33	20 $\frac{5}{8}$	13 $\frac{1}{2}$	41
13 years	31	26 $\frac{1}{2}$	34	20 $\frac{7}{8}$	13 $\frac{7}{8}$	42
14 years	32	27	35	21 $\frac{5}{8}$	14 $\frac{1}{4}$	43
15 years	33	27 $\frac{1}{2}$	36	21 $\frac{5}{8}$	14 $\frac{5}{8}$	44
16 years	34	28	37	22	14 $\frac{7}{8}$	45
17 years	35	29	38	22 $\frac{3}{8}$	15 $\frac{1}{8}$	46
18 years	36	30	39	23 $\frac{1}{2}$	15 $\frac{3}{8}$	47
20 years	38	32	41	23 $\frac{5}{8}$	15 $\frac{7}{8}$	48 $\frac{1}{2}$

CHILDREN'S AND GIRLS' SIZES

SIZE	BUST	WAIST	SLEEVE	BACK MEASUREMENTS	
				Neck-Waist	Neck-Hem
10 years	28	26	17¾	12½	33
12 years	30	26½	19⅛	13¼	37
14 years	32	27	20½	14	41
16 years	34	28	22	14¾	45

JUNIOR MISSES' SIZES

SIZE	BUST	WAIST	HIPS	SLEEVE	BACK MEASUREMENTS	
					Neck-Waist	Neck-Hem
11 years	29	25½	32	22	14½	44
12 years	30	26	33	22¾	14¾	44½
13 years	31	26½	34	22¾	14⅞	45
14 years	32	27	35	22½	15⅞	45½
15 years	33	27½	36	22¾	15¾	45½
16 years	34	28	37	23	15½	46
17 years	35	29	38	23¼	15⅞	46½
18 years	36	30	39	23½	15¾	46½
20 years	38	32	41	23⅝	16	47

Courtesy Simplicity Pattern Co., Inc.

The charts on this and the facing page give a scale of measurements for one make of commercial patterns. Note that both the lengthwise and widthwise measurements are given for each size.

MISSES' SIZES

SIZE	BUST	WAIST	HIPS	SLEEVE	BACK MEASUREMENTS	
					Neck-Waist	Neck-Hem
12 years	30	26	33	22¾	14¾	45½
14 years	32	27	35	22½	15⅞	46½
16 years	34	28	37	23	15½	47
18 years	36	30	39	23½	15¾	47½
20 years	38	32	41	23⅝	16	48
40	40	34	43	23¾	16½	48½

WOMEN'S SIZES

SIZE	BUST	WAIST	HIPS	SLEEVE	BACK MEASUREMENTS	
					Neck-Waist	Neck-Hem
32	32	26	35	23	15½	47
34	34	28	37	23	16	47½
36	36	30	39	23½	16½	48
38	38	32	41	23⅝	16¾	48½
40	40	34	43	23¾	17	49

LARGER SIZES

SIZE	BUST	WAIST	HIPS	SLEEVE	BACK MEASUREMENTS	
					Neck-Waist	Neck-Hem
42	42	36	45	23⅞	17⅞	49½
44	44	38	47½	24	17¼	50
46	46	40	50	24⅛	17⅝	50
48	48	42	53	24¼	17½	50
50	50	44	56	24⅜	17⅝	50
52	52	46	59	24½	17¾	50

If you are in doubt about which of two sizes of a pattern to buy, choose the larger one of the two. Small pleats or tucks can be laid in a pattern to make it smaller with little trouble. However, a pattern that is too small will have to be split and spread, and pieces of paper will have to be pasted under the slashes to bring certain measurements to those which fit you. Measurements needed for choosing your pattern may be taken according to directions on page 340.

Pattern proportions vary. Because pattern companies have not agreed on standard measurements for all of the important lines concerned, the proportions of patterns will be found to vary greatly. If you have learned which make of pattern most nearly fits you, it will be most satisfactory to continue to buy that company's patterns. There are patterns which fit the tall, slender girl best; others which are good for the square-shouldered girl; and patterns which are best for the girl with sloping shoulders. It is possible to learn how patterns of the same size and of similar design but made by different companies compare as to

actual measurement. Similar parts may be laid one upon the other, placing the basic line of each piece on the same line of other patterns.

SUGGESTIONS TO THE CLASS

1. Study the characteristics of the various commercial patterns that are available. What are the helps offered by each that will aid you in constructing your dress? List the outstanding characteristics of each make of pattern.

2. Examine three commercial dress patterns. Become familiar with marks used as aids in placing the pattern on the fabric. What seam allowances are provided? How is the lengthwise fold indicated? What marks indicate pleats?

3. Examine the pieces that make up a simple dress pattern. How can you identify the front of the blouse? How does the back of the blouse differ from the front? How can you tell which is the back and which the front of the sleeve? In the skirt pattern, how can you recognize the back gores?

3. *How shall individual body measurements be taken?*

Structural lines of the body. If we study the outline of the human figure clothed in a simple garment, we find that there are two general directions taken by the lines that are to be seen. Some are vertical and others are horizontal. The vertical lines that are most clearly defined are those which form the outer boundaries of the figure—lines which drop from the shoulder to the hem of the dress. If a rectangle is drawn representing the relationship between the height of the figure and its width at the shoulders, important structural lines of the body will be shown. A line which divides this area vertically might also be drawn dropping through the center of the nose, chin, and chest and continuing to the floor.

If we think of the outline of the figure enclosed within a rectangle, as shown on page 20, one horizontal line would be drawn at the crown of the head and another at the floor line. Are there horizontal or “around-the-body” lines, other than those used to form the rectangle, that are important to the study of the body area? Let us think of those which limit the area covered by the dress. The first one is drawn horizontally through the base of the neck, and another is drawn to represent the hemline. The division between the waist area and the



Left: The working of body lines is an aid in taking measurements and in fitting.
Right: Careful measurements for body lines is necessary for successful pattern alterations.

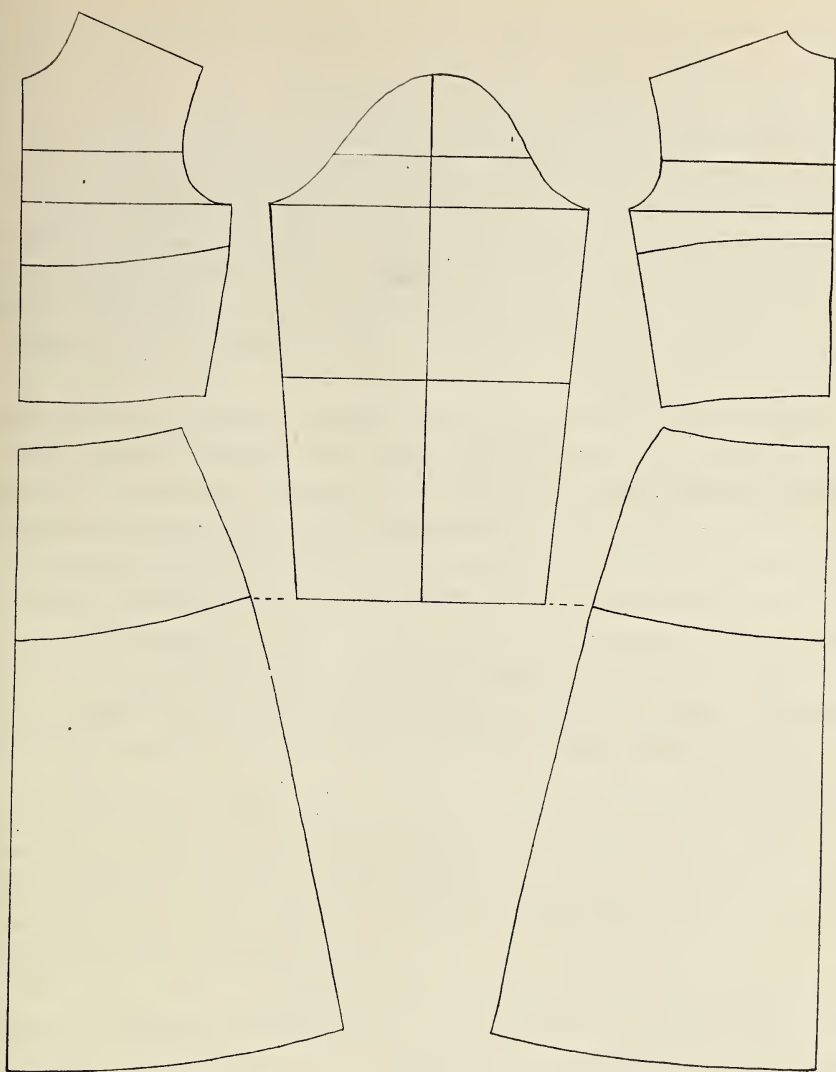
skirt area is next made by the horizontal line at the waistline. The waistline falls at the smallest part of the trunk.

In the area between the neck and the waistline other horizontal lines might be introduced that are important to adapting a dress design to the figure. The chestline is drawn from one armscye to the other, not far below the base of the neck. The scyeline, passing through the lowest points in the armscye, is another horizontal line to be drawn. A third in this area is the bustline, which passes over the tips of the breasts.

In the skirt area there is but one additional horizontal line. This is the hipline, which marks the greatest width below the waist. This width, as we view the figure, is much the same as the width from one shoulder to the other.

Having placed these lines within the body rectangle, we have before us a diagram which resembles the chart given by many pattern companies for taking body measurements. There are some other structural lines to be considered than these, including the shoulder-line and several lines on the arm. A discussion follows showing how to locate each line and the importance of each in fitting a garment to the figure.

Pattern manufacturers and others concerned with the fit of clothing have found that there is one "around-the-body measurement" that serves as the basic structural line in pattern making. This is the scye-



A plain dress pattern with darts omitted, upon which appear the lines where adjustment to individual measurements must be made.

line. The term *scye* is not wholly new. It is used as part of the word *armscye*, a term referring to the armhole of the garment.

Scycline. The scycline passes around the body in a line parallel with the floor through points $1\frac{1}{2}$ inches below the middle of the hair region of each armpit. The line should be located with the arms extended at right angles to the body. A check may then be made on the accuracy of its placement. When the arms are dropped to the sides, the properly

located line will be low enough to just escape the underarm crease. In a dress the scyeline passes through the lowest point in the armscye curve.

Neckline. The neckline is located by placing a tape around the base of the neck where the neck joins the shoulders, allowing it to pass above the large bone at the base of the neck, and through the middle of the pit in the front of the neck. This measurement should be taken accurately to one-fourth inch. Variations in garment design make the establishment of this line of more or less importance in the fitting of garments. It is true, however, that the garment which has first been fitted with a normal neckline usually fits better at the shoulders than one fitted with a lower neckline.

Armscye-line. A correctly located armscye appears, when viewed from the side, as a curve over the top of the shoulder. When viewed from the front or back, it appears to lie parallel to the center front or back as far as the chestline; and below this point it curves gradually toward the underarm. The deepest curve of the front armscye comes in the lower half of the curve. The front must be curved more deeply to allow for the forward swing of the arm. The deepest part of the curve of the back comes in the middle of the back armscye. The correct location of the armscye-line determines the location of the scyeline, the end of the shoulder-line, and the chestline, as well as the highest point of the underarm-line.

The location of the armscye-line is determined in the following manner: With the hand above the shoulder, place the thumb and first finger on either side of the top of the ball of the arm as it swings in the socket; drop lines from these points, parallel to the center front and center back, respectively, to the point where the arm leaves the body. Curved lines are used to continue to the scyeline.

Shoulder-line. The shoulder-line is important in assisting to anchor and balance the garment on the figure.

The location of the shoulder-line is determined as follows: With the person being measured holding her head erect and her face forward, place the length of a pencil on the crest of the bone behind the ear, holding it so that it rests on the neckline and is perpendicular to it. The shoulder-line has its beginning at this point. Extend a pencil at right angles to the armscye. A shoulder seam following the line just located would be too obvious from the front and might pull forward on the figure. For this reason shift this line back three-eighths to one-half inch at the armscye, but hold it in place on the neckline. The seamline should be even and true.

The drop of the shoulder-line is the difference between the measurement from the scyline to the shoulder-line at the neck, and the scyline to the shoulder-line at the armscye. The difference between similar measurements in the back indicates the drop of the back shoulder-line.

Underarm-line. The correct location of the underarm-line, which has its beginning at the scyline, is also important in the fitting of the shoulders. This line and the shoulder-line anchor the garment on the figure. The underarm-line bisects the armpit and falls in a straight line directly under the arm to the floor. To establish this line, place the tape measure over a pencil; then place the pencil under the arm; drop the arm over the pencil, and allow the tape measure, with a weight attached to the free end, to fall to the floor. The line is correctly placed when the second finger falls over the tape as the arm drops naturally to the side. The measurement may be taken on this line from the scyline to the waist, to the hips, and to the bottom of the skirt.

Chestline. To locate the chestline, measure to the center of both front armscyes, and connect the two points with a straight line. Then measure this distance.

Width of the back. The width of the backline marks the distance between the back armscyes. To locate this line, place a tape measure on the chestline and continue the line directly around the body. Measure the distance on this line across the back between the armscyes.

Bustline. The bustline passes around the body over the tips of the breast, across the underarm-line, up until it meets with the back scyline at the tips of the shoulder blades, and across the back in a line parallel to the floor. When locating this line, stand directly back of the person being measured.

Waistline. The waistline is located at the smallest part of the trunk which lies between the lower rib and the top of the pelvic or hip bone.

Hipline. The hipline extends around the trunk in a plane parallel with the floor at the largest part of the hips.

Skirtlines. Certain lines found in the waist are continued into the skirt. These are center front, the underarm, and the center back.

Lines of the arm. The arm, like the body, has important structural lines. These are the line of greatest length and the line of greatest thickness. Because the elbow provides one of the important points of movement, it too must be considered.

The line of greatest length is located by starting from the highest point on the armscye, passing to the elbow, and on just beyond the prominent bone at the wrist. The line of the arm's greatest thickness lies

CHART FOR BODY MEASUREMENTS

	PERSONAL MEASURE- MENT	EASE TO BE ALLOWED	CORRECTED MEASURE- MENT FOR PATTERN
<i>Blouse Measurement</i>			
A. Width measurements			
1. Complete neck measurement.			
2. Length of shoulder-line			
a. Front.			
b. Back.			
3. Width of chest.			
4. Width of back.			
5. Scyline measurement			
a. Complete.			
b. Front, underarm to underarm.			
c. Back, " " " "			
6. Bust measurement			
a. Complete.			
b. Front, underarm to underarm.			
c. Back, " " " "			
7. Waist measurement			
a. Complete.			
b. Front, underarm to underarm.			
c. Back, " " " "			
B. Length measurements			
1. Center front, neckline to waistline.			
2. Center back, " " " "			
3. Measurement from intersection of neck and shoulder-line to scyline			
a. Front.			
b. Back.			
4. Measurement from intersection of shoulder and armscye to scyline			
a. Front.			
b. Back.			
5. Underarm from armscye to waistline.			
C. Sleeve			
1. Sleeve length			
a. Total length to wrist.			
b. Length to elbow.			
c. Height of sleeve cap.			
2. Sleeve widths			
a. Width of cap.			
b. Base of cap.			
c. Width at elbow.			
d. Width at wrist.			

between the elbow and the armscye. When the arm hangs at the side, this line is apparently a continuation of the scyline encircling the arm. This is termed the "base-of-cap line." Just as the scyline is the most important structural line in the waist pattern, so is the base-of-cap line the most important line in the sleeve pattern. Other important "around-the-arm" lines are those at the elbow and at the wrist.

Taking body measurements. Having located the lines on the body, the next step is to take the body measurements. In order that the meas-

CHART FOR BODY MEASUREMENTS (Continued)

	PERSONAL MEASURE- MENT	EASE TO BE ALLOWED	CORRECTED MEASURE- MENT FOR PATTERN
<i>Skirt Measurements</i>			
A. Length measurements			
1. Waist to hip			
a. Center front.....			
b. Center back.....			
c. Left side.....			
d. Right side.....			
2. Hip to floor.....			
3. Hemline to floor.....			
B. Width measurements			
1. Waistline			
a. Complete.....			
b. Front, underarm to underarm.....			
c. Back, " " " ".....			
2. Hip measurement at widest part of body			
a. Complete.....			
b. Front, underarm to underarm.....			
c. Back, " " " ".....			

urements be correct, the person being measured should stand erect, yet in an easy position, with the weight evenly distributed on both feet. The person taking the measurements must be accurate in placing the tape measure on the lines. She must be accurate in measuring, and accurate in recording the measurements. The chart for body measurements is suggested for this record. Mimeographed copies may be prepared ready for class use.

SUGGESTIONS TO THE CLASS

Working in pairs, obtain accurate records of your body measurements, and record them on a blank like the one on this and the preceding page.

4. How shall the pattern be tested and altered?

At the present time few pattern companies use a scientific basis for all of the measurements used in commercial patterns, so that even if you were "a perfect 16," you might find no pattern of "size 16" that would exactly fit you. Because patterns cannot represent each person's exact proportions, and because each of us may present variations from even a normal set of measurements, it is necessary to adjust most commercial

patterns, making changes on the structural lines of the pattern. Body measurements for pattern correction have been taken for the scyeline, the shoulder-line, the armscye-line, the chestline, the width of the back, the waist, bust, and hip lines, the length of the waist, front, back, and underarm, and the length of the skirt, front, side, and back.

The application of the body measurements to the commercial pattern is necessary to indicate what adjustment, if any, is necessary in the commercial pattern. The lines on which the individual measurements were taken are drawn on the pattern, and then the body measurements are applied. Before the pattern can be tested, all seam allowances must be clearly marked and preferably cut off, so that there is no mistaking the area to be checked. Among the common adjustments in the waist pattern are correcting the drop of the shoulder-line, increasing or decreasing the width of the pattern, front or back, and increasing or decreasing the length of the pattern, front or back.

Allowance for ease. All measurements on the body were taken snugly, you will remember. If a pattern were to be altered to these measurements and a garment made over it, you would declare that the garment was too small. All commercial patterns allow the necessary ease to make the garment roomy enough to insure comfort and to introduce such fullness as is demanded by the present style. A garment suitable for work or play is usually cut roomier than one intended for dress occasions.

There is a certain amount of ease that is recognized as the least we can get along with to have the garment comfortable. The following are suggested allowances:

1. Back shoulder seam: $\frac{1}{2}$ inch longer than front.
2. Width of chest: $\frac{3}{8}$ to $\frac{1}{2}$ inch.
3. Width of back: $\frac{1}{2}$ inch.
4. Total bust measurement: 2 to 4 inches.
5. Center front from neck to waist: $\frac{1}{2}$ inch.
6. Center back from neck to waist: $\frac{1}{2}$ inch.
7. Width of sleeve cap: 1 to $1\frac{1}{2}$ inch.
8. Height of sleeve cap: 1 inch.
9. Base of sleeve cap: 2 inches.
10. Hip line: 1 to 4 inches, depending upon the flare of the skirt.

Make these additions to your body measurements, entering the figures in the second column of the chart on pages 364 and 365, under **EASE TO BE ALLOWED**. The sum of the **PERSONAL MEASUREMENT** and the **EASE TO BE ALLOWED** may be entered in the third column, headed **COR-**

RECTED MEASUREMENT FOR PATTERN. With this third column properly filled out, you are ready to work directly with the pattern.

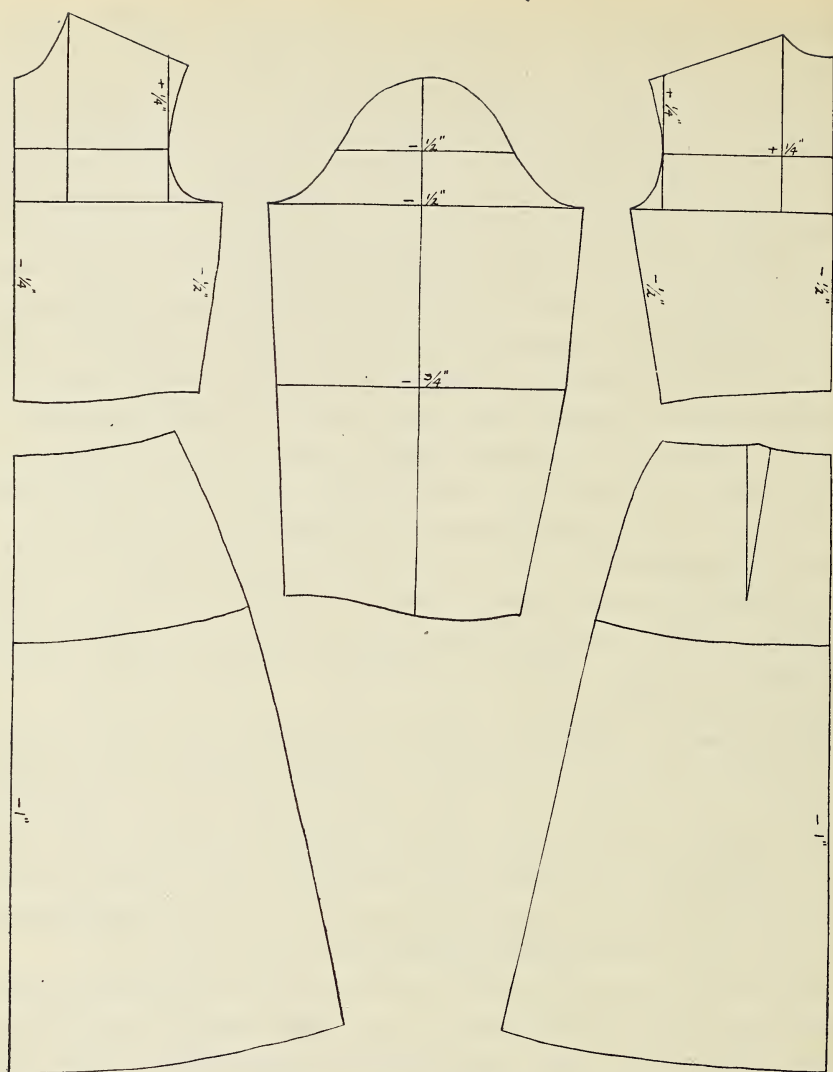
Preliminary check of proportions of pattern. Sometimes it is most helpful in checking the fit of a pattern to first pin together the main parts which represent half of the garment. The garment is then carefully slipped on to learn, in a general way, whether the measurements seem ample and whether the design lines fall where they are most becoming. In pinning a pattern together, it is important to use the exact seam allowance provided. The guide sheet of the pattern should be consulted for help in identifying pattern parts and to learn how parts should be joined. Does the waistline fall at your waistline? Is the pattern too wide through the chest and width of back? A number of questions will arise as your partner helps you to pin and hold the tissue paper pattern in place. Such a testing of the pattern is not sufficiently accurate, even though no changes are indicated, that you can proceed to cut out the garment. It will be necessary to actually measure the pattern and compare these measurements with your own as already recorded. A blouse slightly too short from neck to waistline or a skirt too tight through the hipline might be very difficult to correct after the garment has been cut in fabric.

Measurements applied to pattern. In applying your own measurements to the pattern, it is necessary to have the pattern partly pinned together. For example, those parts which make up the front of the blouse should be left together, and so should those that make up the back of the blouse. The skirt panels, or the skirt yoke and lower section that make up the front of the skirt, should be joined with due allowance for seams. The back should be joined in the same way.

Lines which correspond to the body measurements should be marked with colored pencil on the pattern. Lines to be marked on the front include shoulder-line, center front, underarm-line, width of chest, front scyeline, and front bustline. Corresponding lines are marked on the back of the blouse.

The scyeline is drawn at right angles to the center front and center back through the lowest point on the curve of the armscye of the pattern. This line must be drawn in first so that the slope of the shoulder may be checked. Apply the measurements which you have taken from the scye to the shoulder, both front and back. Does the pattern represent your measurements?

The chestline is drawn in parallel to the scyeline and passes through the mid-point of the armscye. The distance from the scyeline is the



This commercial pattern is marked with changes that are necessary to make it fit individual proportions.

measurement used to draw in the width-of-back line as well as the width-of-cap line on the sleeve. After the scycline has been drawn, lines are placed perpendicular to the scye to check the slope of the shoulder.

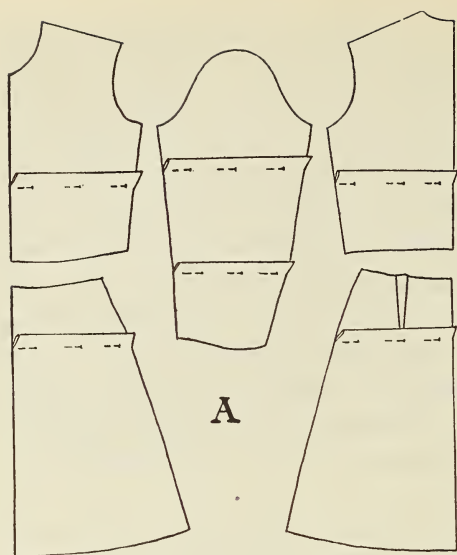
The construction lines important in the skirt pattern are those that indicate body proportions in the skirt area: the waistline, the hipline (which determines the width at the hip and indirectly the width at the hem), and the skirt length.

The hipline, which is the basic construction line in the skirt, is not indicated on the pattern. In checking the pattern, the first step is the establishment of a hipline based on the measurements of the individual. To apply these measurements, first measure down to the hipline and draw, from the point so established, a line perpendicular to the center front, extending it to a distance that is one-half your front hipline measurement. On the underarm seamline establish a point about three-fourths inch above the line so determined, and connect this point with a point about three inches from the center front. This allows the hipline to follow the curves of the body and so places it that it seems parallel with the bustline. To determine whether or not the waistline curve needs to be corrected, your own measurements must be applied to the pattern. The measurement from center front to the underarm on the hipline is also checked.

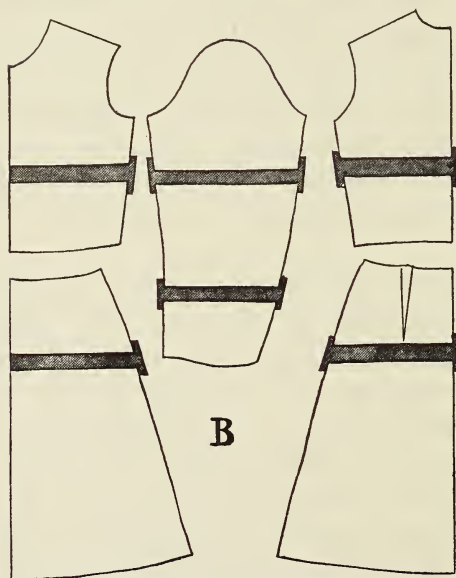
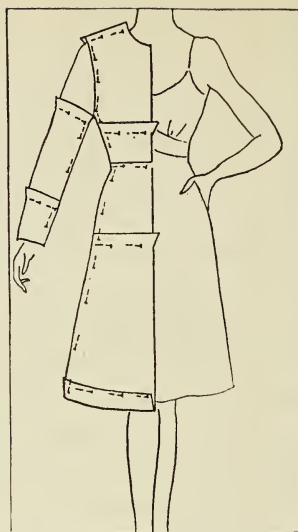
Lines important in the checking of sleeve measurements include the base-of-cap line, a perpendicular line drawn through it which passes through the highest point in the armhole curve and which bisects the base-of-cap, and the width of capline. This is parallel to the base-of-cap and is drawn in at a distance from the base-of-cap that corresponds to the distance between the scyline and the chestline. If you will turn to page 360, you will see the relation between each of these lines just mentioned. The elbow-line should also be drawn. It, too, is parallel to the base-of-cap line.

The measurements of the lines just marked should now be checked against your own measurements, to which the allowance for ease has been added. It is possible that the width of the blouse may be greater than your measurement because gathers or tucks form part of the design. Allowance should be made for these or other design features that add to the fullness of the pattern. The measurement of the pattern on the scye or bustline, under such conditions, will be greater, then, than the measurement that you have recorded. It is possible, too, that the hipline of a skirt that is much flared may be greater than your measurement. Care must be taken not to remove so much of this excess that the style of the garment is lost. Record on your pattern the changes that must be made, using a plus sign and a figure to indicate additions to lines, and a minus sign and a figure to indicate necessary subtractions.

If you will refer to page 368, you will find there a plain dress pattern on which have been recorded necessary changes in proportion. The front of the blouse requires three changes; the underarm-line is one-half inch too long, the center front is one-fourth inch too long, and the



A



B



A: A method of removing extra length from a dress pattern. *B*: A method for adding extra length to a dress pattern.

measurement from the intersection of the shoulder and armscye line to the scyline is one-fourth inch too short.

Necessary changes on the back of the blouse include the following: both the underarm-line and the center-back line are one-half inch too

long; the width-of-back line requires the addition of one-fourth inch on one-half of the back; and the measurement from the intersection of the shoulder-line and the armhole to the scyline is one-fourth inch too short, as was the corresponding measurement on the blouse front.

The sleeve requires the following changes: both the width-of-cap line and the base-of-cap line are one-half inch too long; and the elbow-line is three-fourths inch too long.

The measurements of the skirt correspond with the individual measurements with the exception that the length of both the back and front is too great by one inch.

Making changes in pattern. How shall the necessary alterations be made in the pattern to make it a satisfactory guide over which to cut? In general, there are two ways of making changes: (1) folds may be laid in the pattern to make it smaller; or (2) slashes may be cut in the pattern permitting it to be spread, with strips of paper pasted under the slashes. If a pattern which fits all of your measurements is not available, it is better to choose one that is slightly too large. Tucks can be put in more easily than slashes can be made. Besides, slashing makes the pattern difficult to use the second time.

Tucks or slashes should be made on the grain line of the pattern and within the body of the pattern, so that changes are introduced between lines of articulation. Seamlines, generally, should be left unchanged. If an extra one-fourth inch is needed on the underarm-seam line, such an addition can be made without destroying the style of the garment. Need for more extensive changes calls for additions within the pattern parts. Where tucks or slashes make a jog in the outline of the pattern, a new line, correcting this jog, will need to be drawn. A pattern part may be shortened or lengthened at the lower edge only if it is almost as wide at the center part as at the lower edge. For example, a skirt with little flare is sometimes shortened at the hemline. On the opposite page you will find general directions for making these needed changes in a pattern.

SUGGESTIONS TO THE CLASS

1. Pin the waist front and back together at the shoulder and underarm seams. Carefully put it on and note the changes you will need to make in the pattern.

2. On the pattern you will use to make your dress, locate the lines necessary for you to check the sleeve pattern.

5. How may special pattern alterations be made?

The need for changes in a pattern may be general; that is, if the blouse needs to be smaller, the waist and sleeves also need to be smaller. In other cases, only one part of a pattern requires change. There are ways of making these needed changes that are easily understood with a little study of the matter. Some of the common ones will be discussed here.

Shoulder area. To change the slope of the shoulder, paste a piece of paper under the shoulder-line so that it extends above at the arm-scyeline the needed amount. Changing the slope of the shoulder is necessary for the girl with square shoulders.

To change the length of the shoulder-line, first draw in a line from the mid-point of the shoulder parallel with the center front. To decrease the length, fold in a tuck, and to increase it, slash and spread.

For round shoulders, cut the pattern on the width-of-back line. Either swing the lower part downward until it allows the introduction of one-half to three-fourths inch between the upper and lower part and a corresponding wedge on the center back, or swing the upper section away from the lower part to introduce one-half to three-fourths inch at the neckline. The extra material at the neck is fitted out as darts.

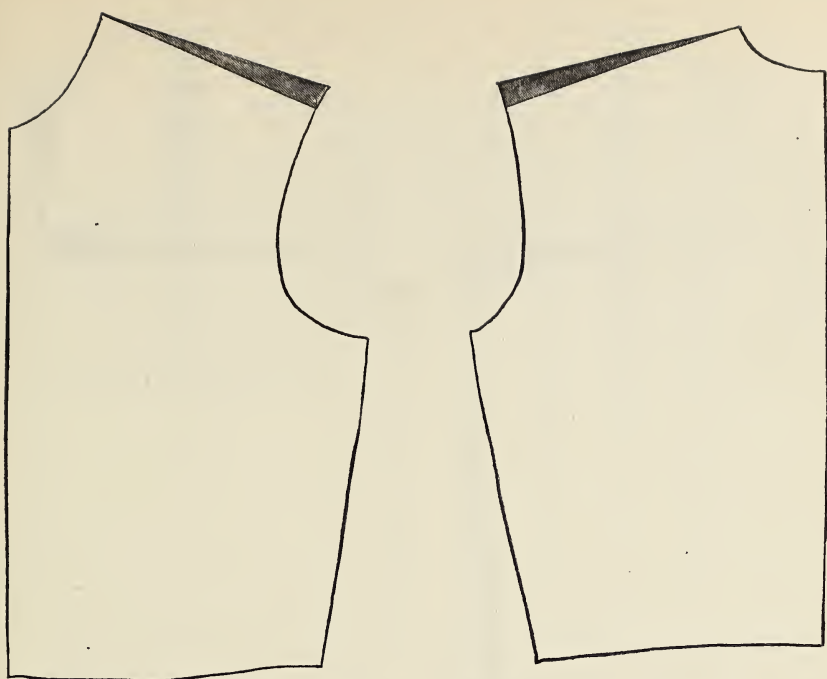
It may also be necessary to change the length of the blouse, back and front. The suggestions offered in the drawing on page 370 will be helpful in deciding where to make the needed alterations.

Sleeve area. For sleeves that need one-half inch or less added through the base-of-sleevecap line or width-of-cap line, slash on the lengthwise line to elbow, then perpendicular to each underarm-seam line. Spread the pattern for the amount needed. Be sure to spread the same on each side of lengthwise line.

For a sleeve that needs over one-half inch increase, slash from arm-scyeline to wrist at A, B, and C, as indicated in the diagram, and spread the pattern at points A, B, and C for about one-third of the needed increase. Again keep the lengthwise line of sleeve true.

To increase the height of the sleeve-cap, slash the sleeve-cap at width-of-cap line. Spread for the needed height, keeping the lengthwise line true.

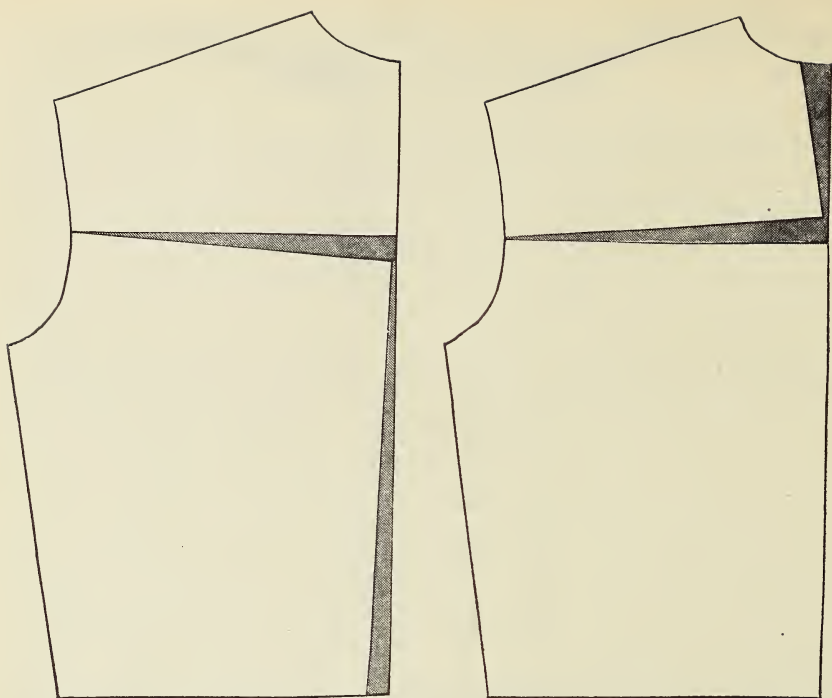
Skirt area. To increase the width at the hipline, slash the pattern from hem to waistline. Spread the needed amount at the hipline. This will increase the skirt at hem edge, but this extra is usually needed.



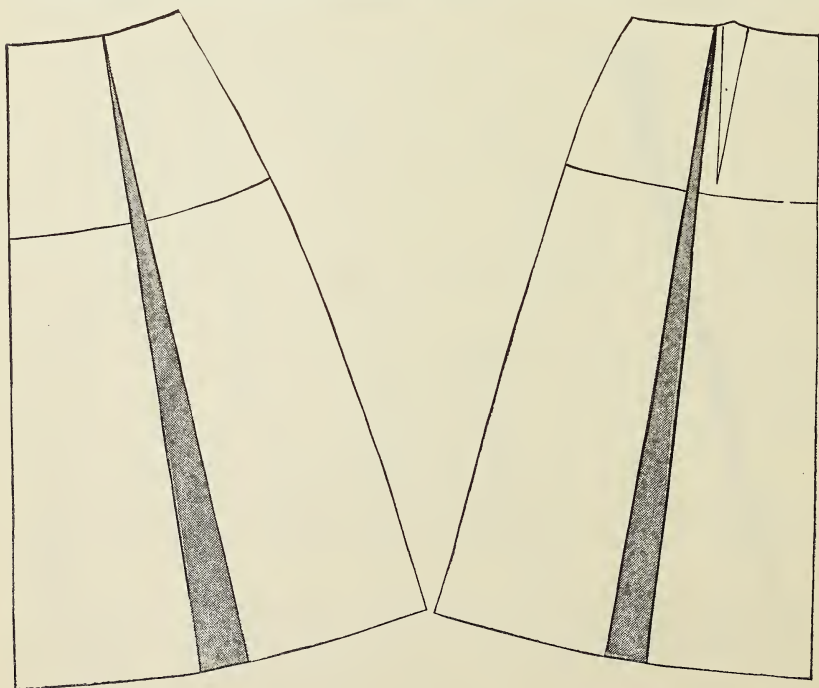
Paper pasted under the shoulder-line indicates needed change in shoulder slope.



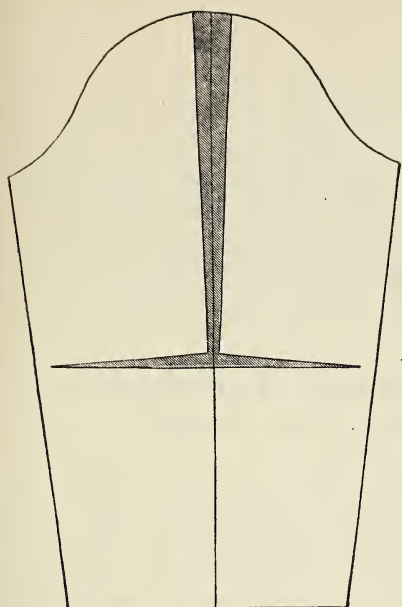
Method for changing width of shoulder and measurement of chestline.



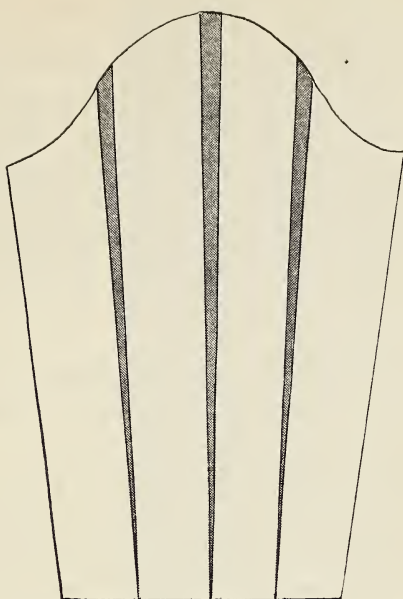
Two ways in which a pattern may be changed to provide for round shoulders.



The skirt that is too narrow at the hipline also needs extra width at the hem.

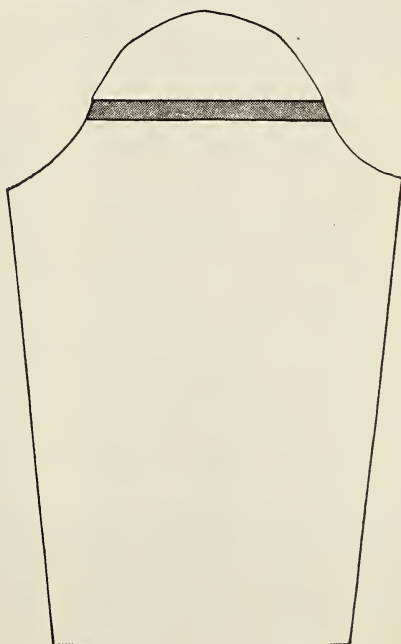


A small amount may be added to the width of the sleeve in this manner.



When the sleeve needs to be enlarged more than one-half inch, this method is suggested.

The "stitch in time." There is an old saying that "a stitch in time saves nine." It may seem strange to talk about stitches before you have begun to cut out the dress, but it is so painfully true that a minute spent here in a careful checking of your measurements and in their exact application to the pattern for its successful alteration may save hours and possibly days of work later, that a reminder may not be amiss. If you wish to make your classwork as free as possible from ripping, right here in the adjustment of the commercial pattern is a fine place to exercise care and exactness. Established habits of good workmanship always stand one in good stead.



This is a method of increasing the height of a sleeve cap.

SUGGESTIONS TO THE CLASS

1. Practice the alteration of patterns by the use of patterns from the school file. Develop your ability to increase the width of the back; decrease the width of the chest; increase the length of the sleeve; increase the height of the cap; change the slope of the shoulder to fit the girl with square shoulders or with sloping shoulders; and to decrease the width of the sleeve cap.

2. Study the proportions of patterns brought to class. Does the price of the pattern bear any relation to the fitting quality of the pattern?

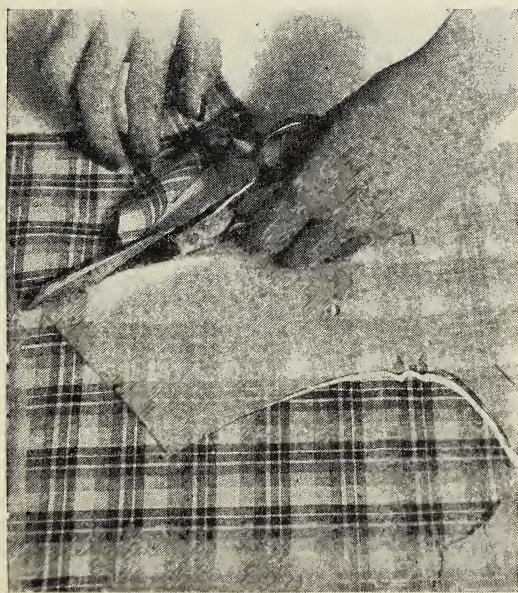
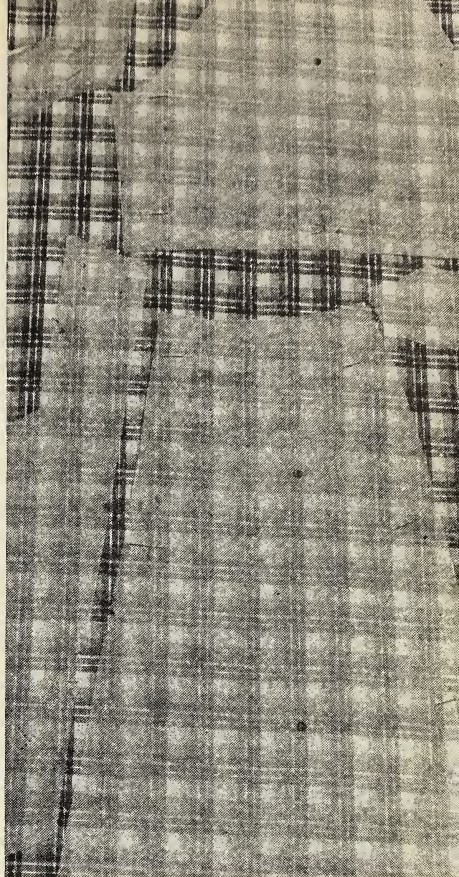
6. What procedure shall be followed in cutting and making the dress?

Preparation for cutting. We have learned that the first step in the cutting of a garment is the preparation of the fabric. If the fabric was guaranteed completely shrunk when it was purchased, the process of shrinking it can be omitted. Otherwise it must be shrunk. A method of shrinking which is somewhat different than the one used in making the pinafore is as follows: Clip the selvages at intervals, lay the material face down on a table, and cover it completely with a wet, but not dripping, muslin cloth—a sheet, for example. Then roll the two layers of fabric together firmly, and allow them to stand twelve or more hours. Unroll the fabric, and iron it on the wrong side until it is dry.

If the fabric to be used is preshrunk, it is still necessary to press it sufficiently to free it from wrinkles, creases, and folds. The center crease, which some persons use in locating the yarn direction for pattern placement, should be removed, since the selvege is a more accurate guide. If the material has not been cut on a thread, it is often necessary to straighten the end. This may be done by pulling out a filling thread across the width of the material, then cutting along this line. If the material has been stretched as it was finished, it is often necessary to pull the material on the true bias, grasping opposite corners, and thus pulling the threads back into place. The material is now ready for cutting.

Cutting the dress. The next step is to apply the corrected pattern to the shrunk and prepared material. First decide whether the fabric design is such that the pattern must be laid in a certain way, if the best effect is to be obtained. If the motif in the design has a definite up-and-down, or if there are plaids that must be matched both as to placement of the plaid in the pattern area and as to color stripes, the laying of the

Top: The picture shows a well-laid pattern. The pattern is placed according to pattern markings. *Bottom left:* Even, long strokes of the scissors give good seam edges. *Bottom right:* Plaid materials should be carefully matched when cutting out a garment.



pattern on the cloth becomes relatively difficult. For this reason the beginner does well to choose a fabric of simple, easily matched design. If the fabric at hand presents any of these special problems, great care must be taken to secure satisfactory placement.

These rules for laying the pattern and cutting the garment should be carefully followed.

1. Lay the largest pieces of the pattern on the material first.
2. Place the main pieces of the pattern on the lengthwise of the material.
3. Lay halves of pieces of the pattern with the straight edge on the lengthwise fold of the material.
4. Lay complete pieces of the pattern, such as sleeves, with their "straight of the material" markings parallel to the selvage or to warp threads.
5. When placing a pattern on the fold, fold the material to the width of the widest part of the pattern. This may permit you to cut small pieces from the remaining side.
6. Follow, whenever possible, the layout chart that is given with the pattern.
7. Pin the edges of the pattern securely to the material before starting to cut, being sure that the pins are placed at right angles to one edge of the pattern and far enough from the pattern edge that they do not hinder cutting.
8. Provide for ample seams, no less than three-fourths inch wide—or, better still, one inch wide.
9. Cut with sharp scissors, with even, smooth strokes. For a garment to be well cut, the pattern notches should be cut out from the pattern and the edges should be smooth.
10. After the various pieces are cut out, the center front and back of both waist and skirt should be marked with long guide bastings, for the entire length of the waist and skirt. The longest line of the sleeve should be marked in the same way, perpendicular to the base-of-cap. This enables one to keep the lines of the dress straight when fitting the garment on the individual.
11. Before the pattern is removed, all construction lines, pleats, tucks, pockets, etc., as well as the seam allowance lines should be marked. This is usually done by means of tailor's tacks. These are made by taking two short stitches through the markings on the pattern and the material, leaving about an inch of thread at each end, and forming a loop above the stitch as the second stitch is made. If there are two thicknesses of material, when the pattern is removed the material is separated and the loops are cut, thus marking each piece.
12. As the pattern is removed from the material, it is folded and put away so that it may be kept in good condition for future use. The cut pieces of the dress are also carefully folded and neatly piled in the sewing box or basket.

Making the dress. In making a dress, as with any other task, a definite order of procedure will be found helpful in securing satisfactory results. This order makes unnecessary much of the ripping and repetition of stitching that are caused by a careless, "happenstantial" approach to the making of a dress or other garment.

Basting. The first step in a desirable plan of work is to prepare the garment for fitting. After the sections of the dress have been cut and marked, it is desirable to run a secure basting thread, or a row of machine stitching, around the neckline to prevent stretching. Pin and baste darts, pleats, and tucks. If gathers are included on any seamline, the rows of stitching must be made and the fullness must be adjusted. All seams should be basted along the line of seam allowance.

In preparation for basting, the sections of fabric are placed together in the position indicated by the markings, and they are pinned, first at the important points and then at points between these. The pins are placed, heads out, perpendicular to the marked seamline. If one section is fuller than the other or is cut on more of a bias, it should be held toward the worker to facilitate smooth placement in both pinning and basting. Proceed from the neckline out on the shoulder seam, from the armhole down on the underarm seam, from the cap curve down on the sleeve seams, and from the hipline up and down on the skirt seams. After the parts of the waist and the skirt are basted together, these two are joined, if the design is for a one-piece dress.

Trying on the dress. The basted garment is then tried on, right side out, to check the fit. Should any correction be necessary, the bastings are ripped, and adjustment is made by pin fitting on the figure.

Further steps. After the dress has been prepared for fitting, the plan of procedure of work falls into the following steps, each of which will be considered in some detail later.

1. Fitting the dress
2. Making the shoulder and underarm seams
3. Finishing the neck
4. Joining the waist and skirt
5. Setting in the sleeves
6. Finishing the sleeves
7. Making and placing the belt and pockets
8. Putting in the hem
9. Removing bastings and tiny short threads
10. Pressing the dress

Experience indicates that attempts to change the sequence of the tasks listed usually result in an unsatisfactory garment. For example,

setting in the sleeve before the neck is finished often leads to creating too short a shoulder-line, and finishing the sleeves before they are set in may result in the finished sleeve being either too long or too short.

Methods of procedure. Throughout the various steps in the procedure of making a dress, approved methods of work should be followed to insure a neat and well-made garment. The importance of approved methods in securing good workmanship is stressed in the following statements as to how one should proceed.

1. Careful handling of materials is desirable.
2. Care in folding and putting work away each day helps maintain desirable standards.
3. Hanging dress on a hanger between work periods keeps it in good condition.
4. Proper adjusting and using of sewing machine is important.
5. Skill is essential.
6. Special care in the choice and making of finishes and trimmings contributes toward a desirable result.
7. Removing bastings, tying and clipping short threads, and pressing are important in the finishing of a garment.

SUGGESTIONS TO THE CLASS

1. In turn, place and pin three patterns in position ready to cut. Criticize your placement as to accurate location with the warp yarns of the material, and as to economy and efficiency.
2. Study the pattern you have chosen, and list the steps in the procedure of making the garment. Can you block out a certain amount of work to be done each day? What will you gain by doing this?

7. What are the steps in fitting a garment?

A well-fitted garment conforms to the structural lines of the body, seems anchored to it, and permits freedom of movement with comfort. In our previous lessons we learned that certain structural lines must be considered if the desired relationship is to be established between the garment and the body. These were as follows:

The shoulder seam, which follows the shoulder-line, should be on the middle of the shoulder, passing as a continuous line from a point below the back of the ear to the tip of the shoulder.

The armscye seam, which follows the armscye-line, drops downward from the joining of arm and shoulder following the outline of the arm in a slight curve bending toward the horizontal until it intersects the underarm-line.

The underarm-line or seam falls in a straight vertical line from the center of the armpit to the floor. The lines of the center front and center back should be perpendicular to the floor.

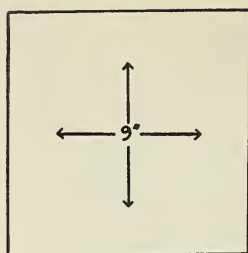
At the scycline, the filling yarns of the fabric of the dress should run parallel to the floor.

Knowing what it is we seek in a well-fitted dress, we turn next to the procedure to be followed in fitting a dress or other garment. The person being fitted should stand on both feet with body erect, weight well balanced, and arms hanging loosely at the sides. The garment to be fitted is put on, right side out, over undergarments similar to those with which it will be worn. It is then adjusted in its proper place on the figure, so that the lines of center front and center back and the warp yarns of the fabric are perpendicular to the floor. For figures which vary slightly from the standard, alterations may consist of changes in seamlines, placement of darts, tucks, or gathers. Such alterations must be made without causing a change in the direction of the filling threads at the scycline or of the warp threads at the center front and back.

Fitting the shoulders. When fitting the shoulders, begin at the neck and work toward the armholes, keeping in mind that the lengthwise threads of the cloth must be parallel to the center front and back of the figure, and the crosswise threads parallel to the floor. The exception to this is that on a large figure the crosswise threads over the bust will slant slightly downward as they approach the underarm seams. Either the front or the back of the shoulder, or both, may need to be altered, but it is best to make the change which will not alter the armscye. If shoulder pads are to be used, the garment should be fitted over them.



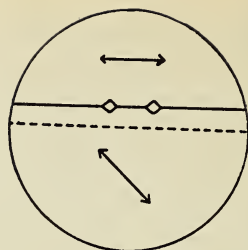
The position of the shoulder line is best determined from the back.



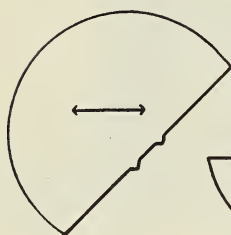
STEP 1



STEP 2



STEP 3



STEPS 4 AND 5



STEPS 6-9



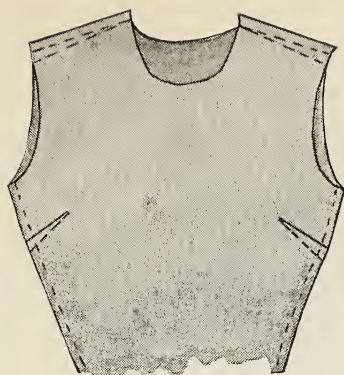
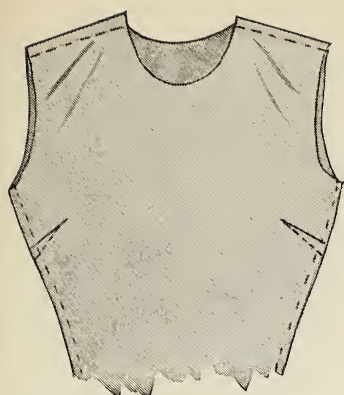
STEPS 10-12



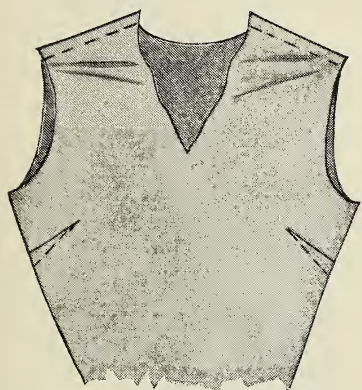
By following the above steps, a satisfactory shoulder pad can be made.

The shoulder pad is an asset to a well-fitted sleeve and shoulder-line. When the shoulder pad is of the proper size and is placed correctly, it adds much to the appearance of the garment. The following steps, if carefully followed will aid you in making a shoulder pad for the garment you are making.

1. Cut a 9-inch square of paper and fold the square in fourths.
2. Using a ruler, make an arc $4\frac{1}{2}$ inches from point of fold; draw the diameter of the circle.
3. Draw a line 1 inch below and parallel to the diameter, and cut along this line.
4. Place the larger part of the circle on the material with the straight edge on the bias with a $\frac{1}{2}$ -inch seam allowance.
5. Place the smaller part of the circle with the straight edge on the straight of the material allowing $\frac{1}{2}$ -inch seams. (The large part of the circle is the top of the pad, and the small part of the circle is bottom of the pad.)
6. Stitch the two pieces together. ($\frac{1}{2}$ -inch seams)
7. Fold the circle through the middle.
8. Pad the material with cotton as desired. Make the first layer of cotton $\frac{1}{2}$ inch smaller than the half circle and each added thickness $\frac{1}{2}$ inch smaller



Diagonal wrinkles from the shoulder-line to the underarm seam can be corrected by lifting the seam at the armseye.

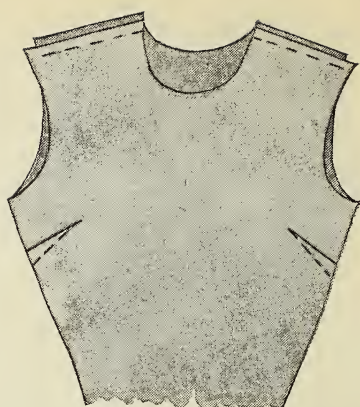
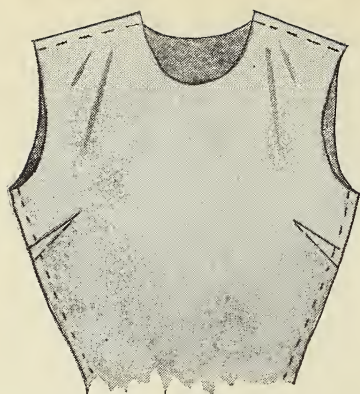


Diagonal wrinkles from the tip of the shoulder to the center front or back may be removed by increasing the width of the shoulder seam at the neck.

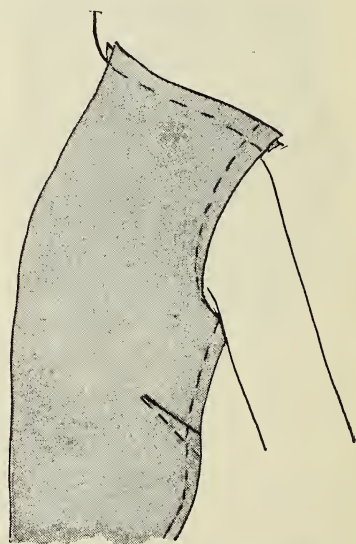
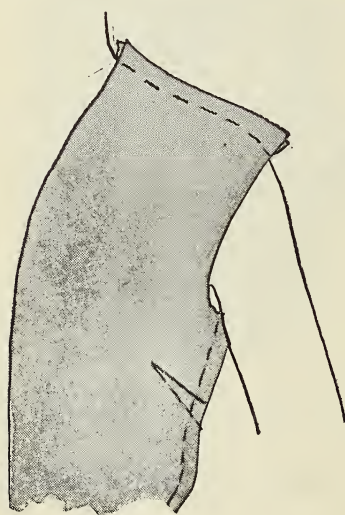
than the last. Avoid ridges in the padding by tearing the cotton rather than by cutting it.

9. Stitch $\frac{1}{2}$ inch back from the curved edge of the semicircle.
10. Shape by rolling and pinning the corners together.
11. Stitch through the pad with long hand stitches to hold cotton in place.
12. Pink the edge.

In basting the shoulder seam, the back of the waist should be held toward the worker. The back shoulder should be about one-half inch longer than the front. By easing this extra fullness into the entire length of the seam, the shoulder blades are fitted more perfectly. In woolen materials it is well to shrink out this fullness after the shoulders have been fitted and before the seam is stitched.



Wrinkles from the shoulder seam to the bustline may be removed by stretching the front shoulder along the filling yarns onto the back and rebasting. A new armseye-line is then marked.

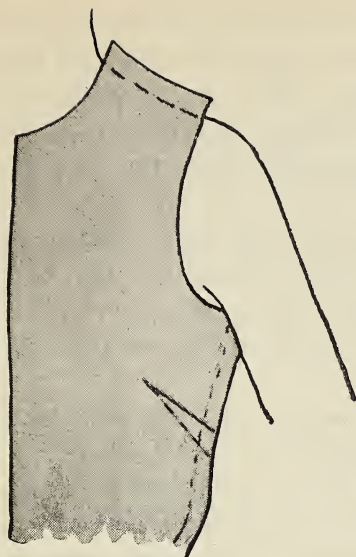


A garment too narrow through the shoulders cannot be altered satisfactorily. a new armseye-line, as shown at the right.

The following are some of the defects which may be found in the shoulders of a garment, with a suggested remedy for each.¹

Shoulder-line incorrectly located. Examples of this defect are found in the illustration on page 385. Open the shoulder seam and lift or let out the back or the front, or both, until the line falls in the correct place. If the person being fitted is round-shouldered, the shoulder-line should

¹ Adapted from *Fitting Dresses and Blouses*, Farmers' Bulletin 1530, U. S. D. A.



A garment too narrow through the shoulders cannot be altered satisfactorily. The pattern should be built out the required amount before the garment is cut.

be placed slightly back of its normal position. This will give a more erect appearance to the figure. Placing it on top or to the front will emphasize round shoulders. On the person of erect bearing, this seam is more becoming directly on top of the shoulder. The shoulder of a garment should be wide enough that the set-in sleeve will not be brought up on the shoulder in such a way that a pinched effect results. Yet the shoulder should be narrow enough that the sleeve does not fall below the shoulder tip and give a drooped appearance.

Diagonal wrinkles from armscye to neck end of shoulder seam. These wrinkles result when the shoulders are more sloping than the shoulder-line of the garment, thus allowing it to sag on the figure. If the seam is wide enough, rip it and make it narrower at the neck, gradually widening it to normal toward the armscye. This will not change the size of the armscye. If the seam is not wide enough to permit this, widen it at the armscye end until the wrinkles have disappeared. This alteration may make the armscye too high under the arm. In this case it must be trimmed out.

Diagonal wrinkles from tip of shoulder to center front or center back. This defect is caused by the shoulders' being less sloping than the shoulder-line of the garment. Rip the shoulder seam, make it wider at the neck, and slope it gradually to the tip of the shoulder. This will make a

smaller neck which may be altered as necessary. If the seam is wide enough to permit, let it out at the armscye, gradually sloping it toward the neck until the garment fits smoothly. This is the better method for stout figures which may need the extra room in the armscye. Since this alteration may make too large an armscye for slight figures, the first method is better for them.

Shoulders wrinkling from seam to bustline. Rip the shoulder seam, stretch the front edge, and rebaste the seam, easing the back onto the front. Trim off the uneven edges at the neck and armscye. In some cases a small dart or tiny tucks may be made in the front shoulder to remove these wrinkles.

Shoulders too wide. Very often in large-sized patterns and ready-made garments the width of the shoulders has been increased in the same proportion as the bust measure. Because the shoulders are a bony structure and the bust is a tissue structure, the shoulders do not necessarily increase in proportion with the bust. Therefore, the garment is likely to be too long on the shoulder, and the armscye may not be in its proper position. This long shoulder tends to give a broad effect to the figure. In the front and back of the pattern, fold a small lengthwise dart through the center of the shoulder, and take out the necessary amount. Be sure to keep the back shoulder from the neck to the armscye one-half inch longer than the front shoulder. Rip the shoulder seam, and recut the armscye from the altered pattern. This preserves the original armscye and is safer than trimming it out. If fullness is desired, make tucks or shirring in the front shoulder to take up the extra width.

To alter a ready-made garment with too wide shoulders, make a small lengthwise dart or a group of tucks in the front shoulder, and trim out the armscye in the back.

Shoulders too narrow. Build the shoulders of the garment out to the proper width, keeping the threads of the added pieces straight with those in the garment. This alteration is possible only when making a foundation pattern. There is no remedy if the dress itself has been cut incorrectly. The pattern that was used is too narrow across the shoulders. A size large enough to fit the shoulders, regardless of the bust measure, should be obtained; or the pattern which is too narrow may be split from the center of the shoulder to just below the waistline and spread apart the necessary amount.

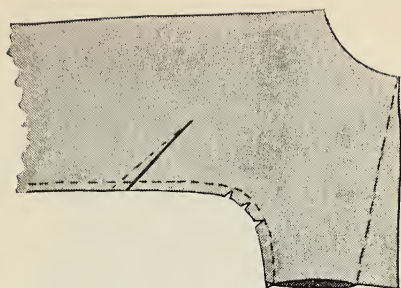
Garment stands away from shoulder. Increase the width of the shoulder seam until the garment fits closely to the shoulder, being careful to keep the seam in its correct location. If there is a dip between the neck

and the tip of the shoulder, make the seam wider in the center than at the ends.

Dart bulging at end. Any dart that has been made too wide for its length will bulge at the end. Rip out the dart and pin it in the correct width. In some cases the dart may be lengthened instead of made narrower.

Shoulder adjustment in kimono-sleeved dress. The fit of a kimono-style garment will be improved if it has a shoulder seam. If the pattern has not allowed for one, make a fold in the pattern or in the material directly on top of the shoulder. Measure down one to three inches from this fold at the sleeve end, the width depending upon the slope of the shoulders. Draw a line from this point to the point where the fold meets the neckline. This seam will help to adjust the costume to the figure. When this alteration is made, let out the underarm seam the same width as that taken off the shoulder. If this is impossible, set in a gusset to make the armhole the correct size. The hang of the underarm seam should be tested in a kimono dress before it is basted.

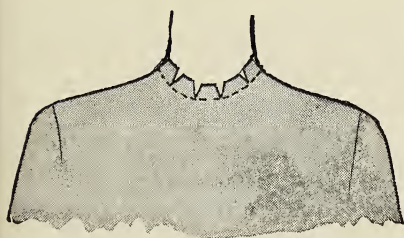
Fitting the neck. After fitting the shoulders, the next part to be adjusted is the neckline. It should form a good curve from the prominent bone at the base of the neck in the back to just above the collarbone in the center front. The line should be high rather than low in the back and on the sides. A cord may be placed about the neck to help find the correct position. This line in the neck of a dress should fit snugly, but



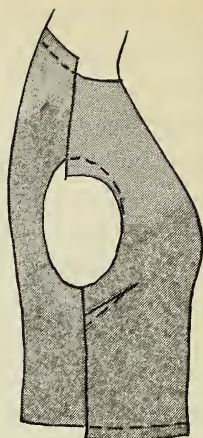
A kimono sleeve garment often requires some adjustment if it is to fit properly over the shoulder and if comfort to the wearer is insured.

not tightly, and should be sufficiently high that when the neckband or collar is pinned to it, there will be no strain anywhere. A seam allowance of three-eighths inch is sufficient.

For a garment with a close-fitting collar, keep the neckline comparatively high at the back and sides in order that a tailored effect may be obtained. If the collar is placed too low, its effect is unbecoming since it makes the neck appear large.



The neckline which is too small or too high may often be corrected by snipping the seam edge at right angles to the neckline and establishing a new line.



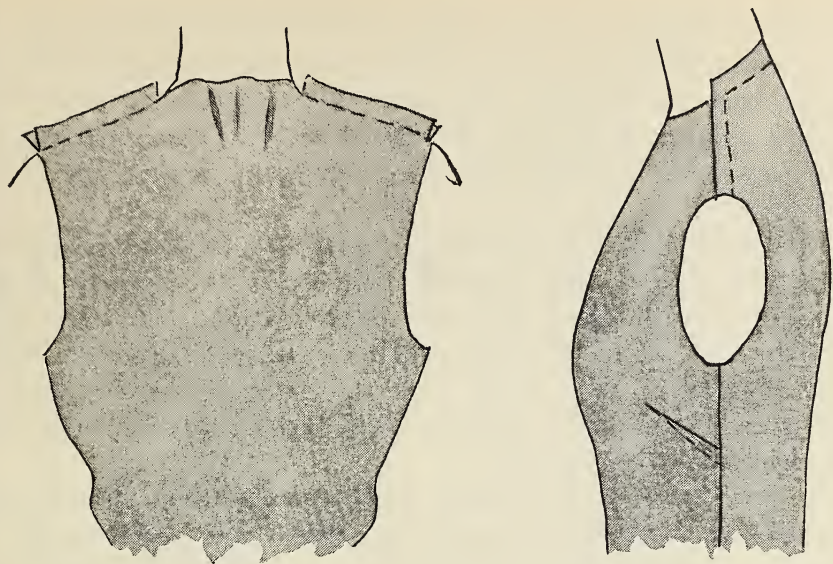
A bulge in the front of the neck can be removed by ripping the shoulder seams, smoothing the material over the chest, and repinning the shoulder seams, which will no longer coincide at the neckline.

For the person who is plump and rounded at the back of the neck, keep the shoulder-line slightly back of its normal position and the neckline high in the back. A slight fullness at the center back of the garment will make it fit better.

The following are some of the defects which may be found in fitting the neck of a garment, with directions for correcting them.

Neck too small or too high. After the shoulder-line is correctly located, mark the normal neckline with chalk or with a row of pins. If the neck is too high, snip the neck edge at right angles every half inch. Be sure to allow three-eighths inch for a seam between the end of the cuts and the normal neckline. When the neckline is in the right position but too tight, let out the shoulder seam, if it is wide enough to permit.

Neck bulging in front. If the bulge has been caused by a stretching of the neck edge, place running stitches one-eighth inch apart at the neckline; draw up the required amount and fasten the threads securely. If the bulge is slight, raising the front at the shoulder seams will suffice. If the bulge is too large to be altered by either of these methods, open the shoulder seam and slip the front of the shoulder beyond the armscye-line until the lengthwise threads are parallel with the center-front line; then build up the neckline and trim out the armscye. On stout figures the following method is very successful. Leave the armscye unchanged and form the extra fullness into a dart, small tucks, or shirring in the front shoulder. Then build up the neckline with added pieces. Unless



A bulge at the back of the neck can be removed by ripping the shoulder seams and smoothing the excess material upward and outward before re-pinning the shoulder seams.

the dress is to have a collar or trimming, only the foundation pattern should be altered in this way. Never take out a bulge by lapping the fronts unevenly or by making a dart in the center front. In either of these cases the lengthwise threads of the material would not remain parallel with the center front.

Neck bulging in back. Be sure that the shoulder-line is correctly located. If the bulge is small, ease in the extra fullness when finishing the neck edge. If too much extra width to be eased in was added when cutting the back, shirring or a group of tiny tucks will take up the extra fullness. If the bulge is large and caused by an irregularity of pattern or figure, rip the shoulder and underarm seams. Raise the back if necessary, smooth out the bulge, and form a new shoulder-line. Build up the neckline at the back or trim it out as required. Trim out the armseye at the shoulder if necessary.

Neck too large. After the shoulder-line is correctly placed, build up the neck with fitted pieces according to the directions given under the heading *Neck bulging in front*. In some garments the shoulder seams may be made wider in order to remedy a large neck, but very often this method is not successful.

Horizontal wrinkles at center front of neck. The neck of the garment may be too high in front. Snip at right angles to the edge until the cor-

rect line is obtained and the wrinkles disappear. Be careful, however, to leave a seam allowance. If these wrinkles occur on a stooped, flat-chested figure, open the shoulder and underarm seams, raise the front, and smooth it out across the chest. Form new shoulder seams and armseye and neck lines. The defect may also be caused by very erect or square shoulders.

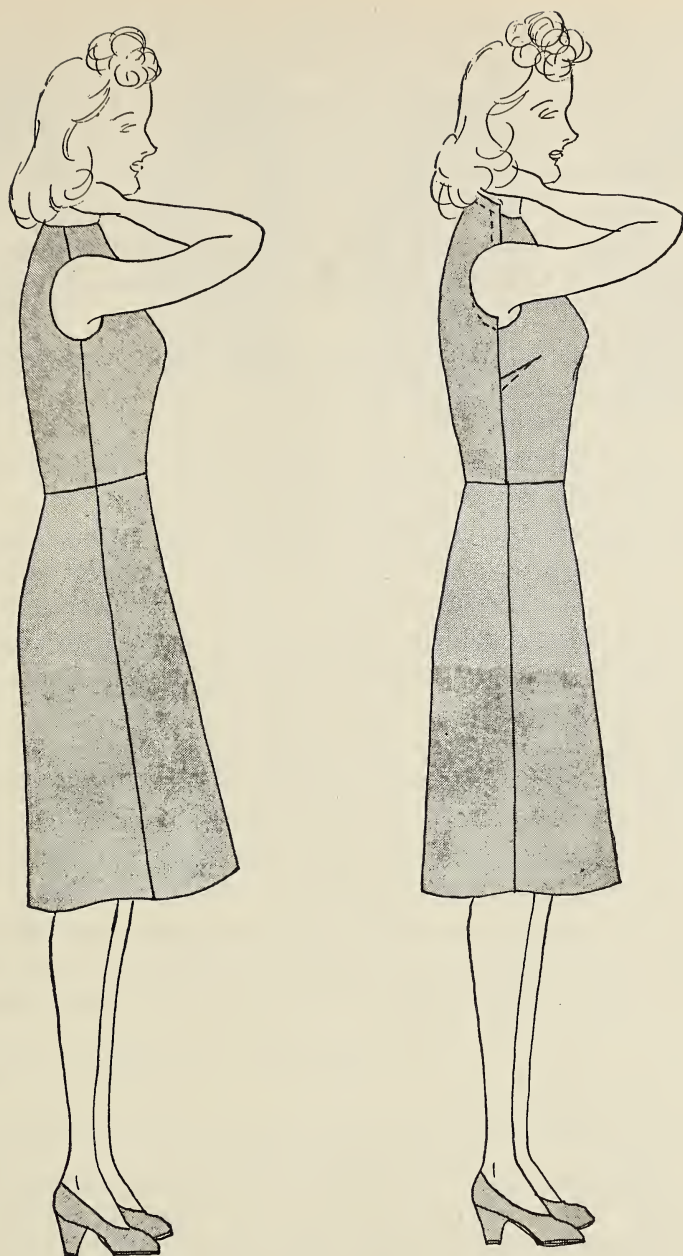
Horizontal wrinkles across back of neck. The neck is probably too high and too tight. These wrinkles may also be the result of an improperly fitted shoulder. Open the shoulder seam and ease the back onto the front, allowing for slight fullness to be gathered into the neckband at the center back. It may be necessary to raise the entire back of the garment to provide this fullness. Build out the shoulder to the correct armseye-line if necessary.

Neck too narrow in front. Open the shoulder seam and slip the front toward the neck without changing the width of the shoulder seam. In some materials the front shoulder edge may also be stretched and rebasted to the back edge to relieve this tightness. Be sure in every case that the lengthwise threads lie parallel with the center front line.

Neck and shoulders sliding back. This fault is most common in dresses and blouses with kimono sleeves, although it often occurs in other styles. Either the shoulder-line is not well placed, the neck is cut out too large, or the front and back do not balance at the underarm seam. The difficulty is not usually detected until the garment is worn for the first time. To be sure it will not appear after the dress is finished, test the hang of the dress before the underarm seam is basted. First be sure the shoulder seam is in its correct position. Then observe whether the front and back edges of the underarm seam hang evenly or whether one extends below the other. If the back extends above the front at the armhole and has to be pulled down in order to be basted according to the pattern markings, the dress will slide back at the neck and shoulders. If the dress is to stay in position at the shoulder, the back and front must be balanced on the figure.

To remedy this defect, let the front and back edges of the underarm seam fall naturally from the armpit to the floor. Pin them together in this position, and baste. For a slender figure, trim out the armhole in the back if the back edge of the underarm seam does not extend more than one-half inch above the front edge. If the figure is large or the difference is more than one-half inch, trim out the armhole in the back, and increase the width of the shoulder seams.

On some figures one or more small darts taken in the front at the



The sliding back of the neck and shoulders of a garment is usually accompanied by a forward swing to the underarm-line.

underarm seam about three inches below the underarm curve, or a dart at the beltline, may keep the neck and shoulders from sliding back.

Fitting the dress to the waist and skirt areas. The underarm seam is the place to make most of the changes which are necessary because of irregularities of bust, hips, back, and abdomen. These parts should be fitted after the shoulder seams and the neckline have been properly adjusted. The underarm seam should be directly under the high point of the shoulder and should appear to be a continuation of the shoulder seam.

When basting, a little fullness eased into the front edge of the underarm seam for the first ten inches below the armhole will make a garment set better, whether it has set-in or kimono sleeves. Small darts will serve the same purpose. This fullness must be only in the front, as otherwise the underarm seam will swing toward the front.

On stout figures the crosswise threads of the material may slant slightly downward near the underarm seams. However, the general rule holds that these threads should be parallel to the floor in the center front. The garment should fit easily across the bust, with some looseness. In addition, care should be taken not to fit any garment too tightly across the back or the bust.

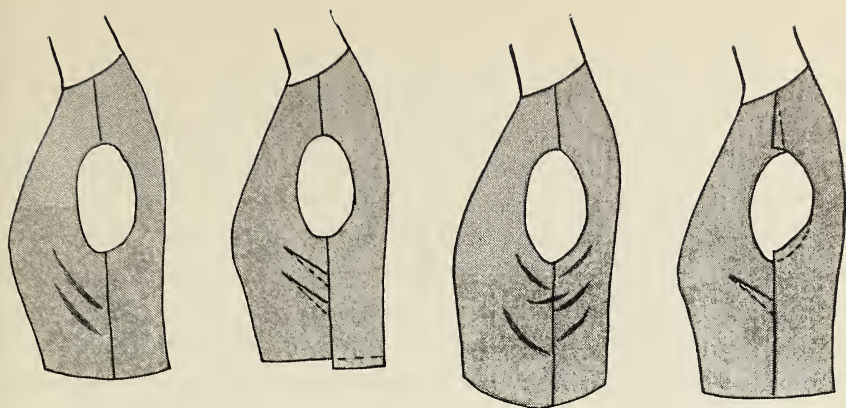
The figure with large bust and small hips and abdomen should be fitted loosely below the bustline in order not to exaggerate the size of the bust. Large hips seem smaller if the waist is fitted loosely, especially under the arms. The figure with a large abdomen is the most difficult to fit, especially if the bust is small.

If there is extra fullness in a skirt, take it out equally at the side seams, keeping the material hanging straight. Most altering is done at the hips. Fullness is usually distributed at the sides, with the back and front left plain, but this varies with fashion.

In addition to these general considerations, the following defects in fit often require adjustment.

Diagonal wrinkles from bustline to underarm seam; garment swings to front. These wrinkles may be found in fitting the figure which is much narrower across the back than across the chest, or which has sloping shoulders. Underarm darts often correct this difficulty. However, on a very erect person with an unusually large bust, whether a large or a small figure, the bustline of the garment may be higher than that of the figure, thus causing these folds. In this case darts on the underarm seam will not correct them.

Dress sagging under arm. Diagonal folds may appear on either or



Diagonal wrinkles that form under the arm can often be corrected by taking one or more darts on the underarm-line; the shoulder seam may also be made deeper at the armseye.

Sagging at the underarm may be corrected by placing a dart on the underarm-line and raising the back as shown in the drawing at the right.

both sides of the underarm seam. Very often in ready-made coats and dresses these diagonal folds appear in the back from the shoulder blades to the underarm seam. They are caused by sloping shoulders, by the shoulder of the garment being too wide, or by the garment being too large. If the sagging folds appear only in front, the defect may be corrected by ripping the underarm seam and folding in one or two darts on the front edge near the armseye, or by a shoulder dart. If only the back sags, rip the shoulder and underarm seams, lift the back above the front, baste the seams, and mark a new armseye-line in the back. If the folds appear in both the back and front, increase the width of the shoulder seam at the armseye end until the wrinkles disappear. After you have done this, recut the armseye.

Dress too small at bust and hips. Let out the underarm seam, or if the garment is long enough, raise it at the shoulders until it is not tight at the bust and hips. The latter method can be used only when the shoulders have been cut too wide. These methods may be used if the garment is but slightly too small.

Dress too loose at bust and hips. Make the underarm seam wider. If only the back of the garment is too wide, alter only the back edge of the underarm seam. This change is best for a garment that is only slightly too large.

If a garment is very loose below the bustline and also measures too large around the bottom, it may be recut.

Underarm seams slanting toward back. The back of the dress or blouse swings away from the figure if the underarm seams fall toward the back. Rip the shoulder and underarm seams, and raise the back of the garment at the shoulder without altering the neckline. At the underarm seam this will bring the back higher than the front, and after the seam is basted the armscye must be recut.

Underarm seam slanting toward front. This defect will always make the skirt swing out in front. There are several ways of correcting it. One is to open the underarm seam and to take a dart parallel to the floor from three to five inches long on the front edge at the beltline or at the fullest part of the bust. One or more darts in either of these places, or both, are especially needed in dresses for stout figures, but a small dart under the arm improves the hang of any dress. The width of the darts will vary with the figure and with the number needed. Sometimes gathers are used, but they are not so satisfactory unless the fullness is slight.

Another method that is effective on large figures is as follows: Rip the entire underarm seam and the shoulder seam two-thirds of the way from the armscye to the neck. Raise the front at the shoulder without altering the neckline. Lay the fullness thus obtained in a dart from the shoulder seam to the bustline and parallel to the center front. Unless the shoulder has been cut too wide, this change can be made only on the foundation pattern. Build out the shoulder and form a new armscye. Tucks or shirring may be used instead of a dart. If other darts are necessary, make them at the beltline rather than under the arm. Darts will not correct this difficulty in every case—for example, not in a garment with a bustline higher than that of the figure.

Waist too tight across back. The most successful remedy for this difficulty is to rip out the sleeves and set them in a lining. Shaped pieces of the dress material about two inches wide should be basted around the armscye on the right side of the lining before the sleeve is set in. This prevents the lining from showing at the armscye. Bind or face the armholes of the dress.

If this method is not desirable, set a panel of the material or of the trimming in the center back if the style of the dress will permit its use. As a last resort, cut a new back.

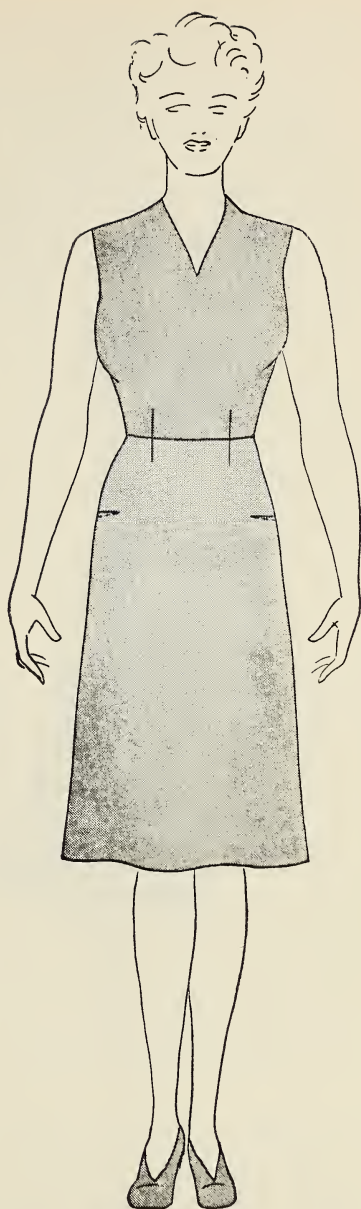
Waist drawing in under arm. The armscye may be too high and narrow, the sleeve may be too small for the armscye, or the waist may be fitted too closely under the arm. The defect appears most often with figures having a large bust. To remedy, trim the armhole lower under

the arm, or widen the armscye by letting out the underarm seam or by setting a strip of material in the seam if there is not extra seam allowance. If these changes are made, increase the size of the sleeve by letting out the seam or by setting in a gusset from the armhole to the elbow.

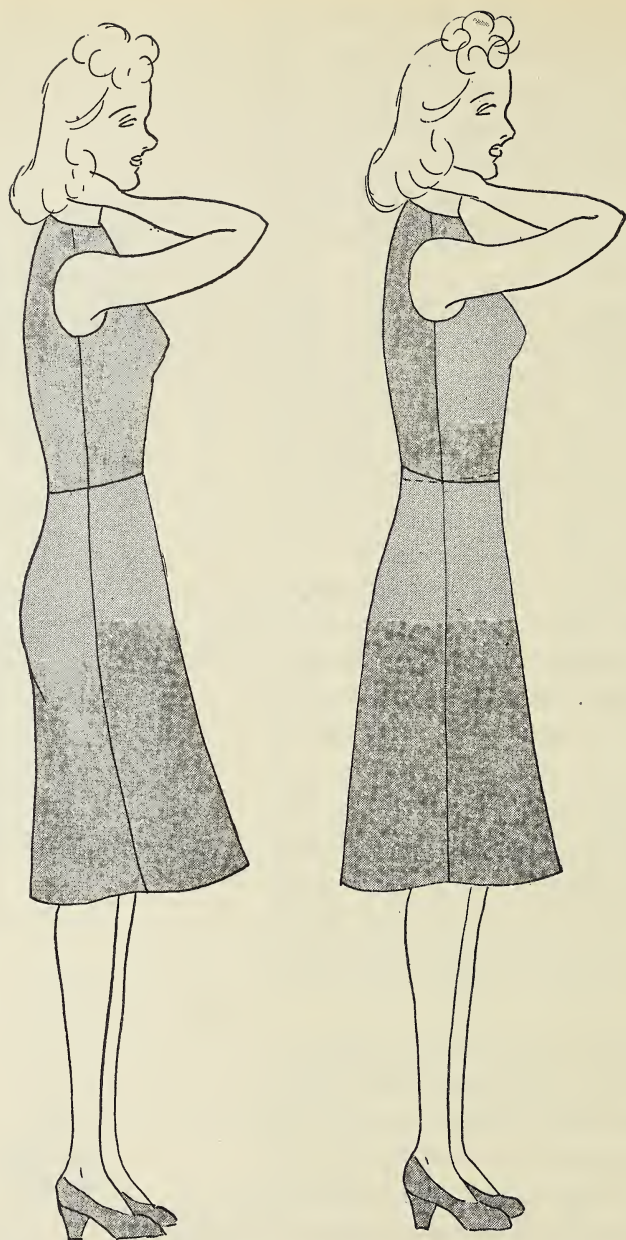
Horizontal wrinkles across chest. These wrinkles are most likely to appear on thin figures if the measure from armhole to armhole across the chest of the pattern is too narrow. A pattern with a wider shoulder should have been used. The sleeves may be ripped out and set in a lining, or a vest or a panel may be set in the full length of the front. These are the only ways of correcting such a defect after the garment has been cut, or if it has been discovered in a purchased ready-made dress.

Skirt drawing across abdomen. The side seams may not be correctly placed, too much fullness may have been drawn to the back and should be redistributed, or the skirt may not have been cut to fit the figure with a large abdomen.

For the figure with a large abdomen, mark the front of the skirt seven inches below the normal waistline on the hip seam, and make a dart at this point perpendicular to the seam, about one-half inch wide and several inches long. A dart of this kind on each side of the skirt will also prevent it from pushing forward at the bottom. Do not lift the back to correct this, for the skirt seams will be pulled out of place.



Darts placed 7 inches below the normal waistline and perpendicular to the underarm seamline on the front of the skirt relieve a tendency for the skirt to draw across the abdomen. Short vertical lines at the waistline may also be necessary.



The fit of a skirt that cups in at the back may be corrected by raising the back of the skirt, at the same time lowering the front at the waistline.

Skirt "cups in" at back. Raise the skirt on the belt at the back so that the gathers will hang straight from the belt to the hem. If a one-piece dress needs this alteration, raise the entire back at the shoulder seams.

Skirt seams swinging toward front or back. If the skirt swings toward the front, hold the front edge slightly full for the first ten inches from the beltline when pinning the side seam. If the seam slopes much, a small dart may be made on each side of the front underneath the belt. The skirt may also be raised slightly in the back, or lowered slightly in front. If it has a tendency to swing out in the back, this may be corrected by lowering the back or by raising the sides and front, or both.

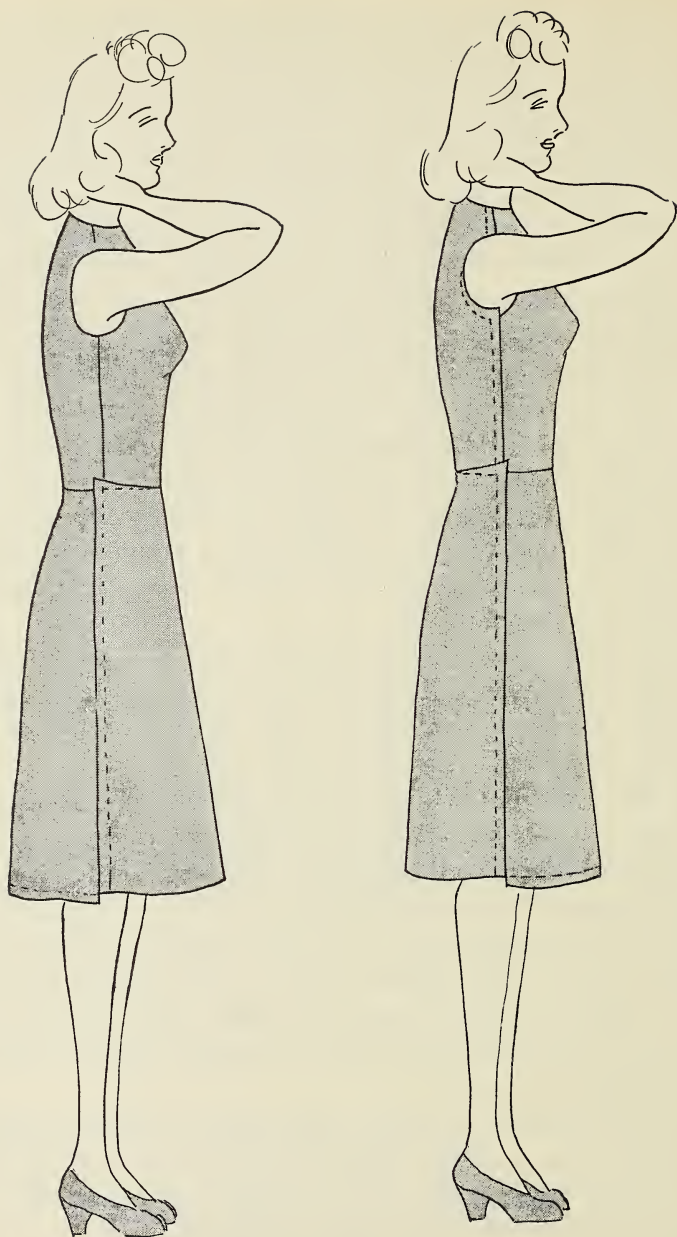
Skirt too large at hips. If there are two or more seams, take out the fullness at the seams. If there are no seams, fullness may be taken out in vertical darts which extend down from the beltline. The position of these darts will depend upon the size of the figure. On slender figures make the darts on the hipline. For a figure with large hips or abdomen, divide the skirt into quarters, marking these points at center front, center back, and hips. After you have marked these points, place a dart at the center of each quarter.

Skirt too small at hips. If extra allowance has been made on the side seams, let the seams out. If the skirt is gored and it is long enough, lift the skirt and form a new waistline. If the skirt is not gored, add an extra width of material to the entire length.

Fitting the armscye. With close-fitting sleeves the armscye seam should curve to fit the underarm as closely as is comfortable, and must be on the highest point of the shoulder. If the tight-fitting sleeve is set in a wide shoulder, the sleeve will bind the arm and pull at the seam. If it is put into an armscye that is too large underneath, the dress will pull across the bust. Stout figures require a closer-fitting armscye and one that is higher under the arm than do the more slender types. If a shoulder pad is to be used in the dress, the armscye should be fitted with the pad in place.

The shoulder may be wider for a shirt sleeve, extending slightly beyond the tip of the shoulder. The shirt sleeve does not fit so closely as the other types of set-in sleeves. The armhole should be fitted rather loosely for the figure with very round shoulders.

If the armscye is altered, the sleeve will also need to be altered in order to keep the same relation between the edge of the sleeve and the armscye. The sleeve should measure about $1\frac{1}{2}$ inches greater at the armscye-seam line than the armscye-line of the blouse. Before altering the armscye in any way, be sure that the shoulder seam is in its correct



The underarm seams of a garment may swing toward the front or toward the back. *Left:* The changes necessary to correct a forward swinging line. *Right:* To correct a backward swinging line.

position. Mark the highest point of the armscye when the garment is being fitted. This point may be at the shoulder seam, but it is most likely to be one-half inch in front of it.

Some of the following alterations may need to be made in fitting the armscye.

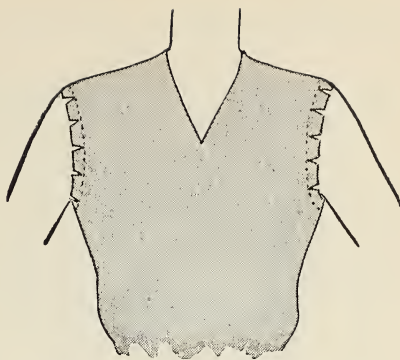
Armscye too small. Either the shoulder and underarm seams are taken in too much or the armscye has been cut too small. Let out the shoulder and underarm seams, or only the shoulder seam, depending upon how much room is needed. If it is still too small, mark the correct armscye-line with crayon, basting, or pins. Snip the edge at right angles every half inch, being careful to leave three-eighths inch for a seam allowance and not to cut beyond the correct location for the armscye.

Armscye too high under arm. After the neck and shoulder have been fitted, snip the edge of the armscye at right angles under the arm until it feels comfortable. Care must be taken not to make the armscye too low or too wide at the underarm. All bulges should be remedied before the size of the armhole is changed.

Armscye too large. In most instances this defect can be remedied by taking wider shoulder and underarm seams, or it may be necessary to alter only one or the other. However, if the armscye tends to bulge at the front or the back, or at both, taking in the seams will not suffice.

Waist bulging at front of armscye. These bulges are often caused by incorrect proportion from the shoulder to the underarm. They may also be found on an erect figure with a large bust. If the bulge is small, take a small diagonal dart in the pattern from the armscye toward the tip of the bust, and recut the armscye. In some materials a slight bulge may be removed by shrinking out the extra fullness or easing it into the seam.

For the erect, large-busted figure a dart placed from the shoulder to the bustline is the best remedy. If the shoulder is too wide, this change can be made on the garment. Rip the shoulder seam and form the dart wide enough to remove the bulge at the armscye. If the shoulder is too narrow, make his change only on the foundation pattern. After laying the dart as described, widen the front of the shoulder at the armscye.



When the armscye is too high under the arm, the edges may be snipped and a new armscye-line established.



A waist bulging at the armseye may be made to fit either by using the shoulder dart or by placing the tucks or shirrings in the front shoulder of the blouse.

Another method which can be used on the foundation pattern is to open the underarm seam and drop the front lower than the back. Build up the front even with the back and form a small dart in the front under the arm to prevent the underarm seam from swinging forward.

Waist bulging at back of armseye. Round shoulders will always cause a loose armhole at the back. If the bulge is small, rip the shoulder seam three-fourths of the distance from the armseye to the neck and move the back up on the front, thus taking a wider seam off the back than off the front at the shoulder end. Be sure in doing this not to move the shoulder seam out of its correct position.

Another simple method is to recut the back after folding a small dart in the pattern at right angles to and through the center back of the armseye. If there is a large bulge which cannot be removed by either of these methods, as a last resort make a dart in the same position in the dress. In woolen materials the fullness may be gathered and shrunk out until the bulge has entirely disappeared.

Wrinkles from tip of bust to armseye. These wrinkles sometimes appear if the figure has a large bust and is flat-chested. Rip the shoulder seam two-thirds of the distance from the armseye to the neck and form a dart, tucks, or shirring in the front shoulder.

SUGGESTIONS TO THE CLASS

1. Study pictures of yourself taken in a bathing suit, one a side view and one a front view. Determine what effect your figure as shown in the pictures

will have upon the appearance of your clothes. What fitting problems do you anticipate?

2. Bring from home garments that you recognize as being well fitted. Try on these garments and study each to determine what gives it the well-fitted appearance.

3. You have constructed a dress at home. After having basted the main seamlines you have tried on the dress, wrong side out. The garment fits satisfactorily, but after stitching you find that it does not fit closely to the neck at the shoulder-line and seems too large at the underarm-line. What is the advantage of fitting the garment right side out?

8. What are the next steps in the construction of the school dress?

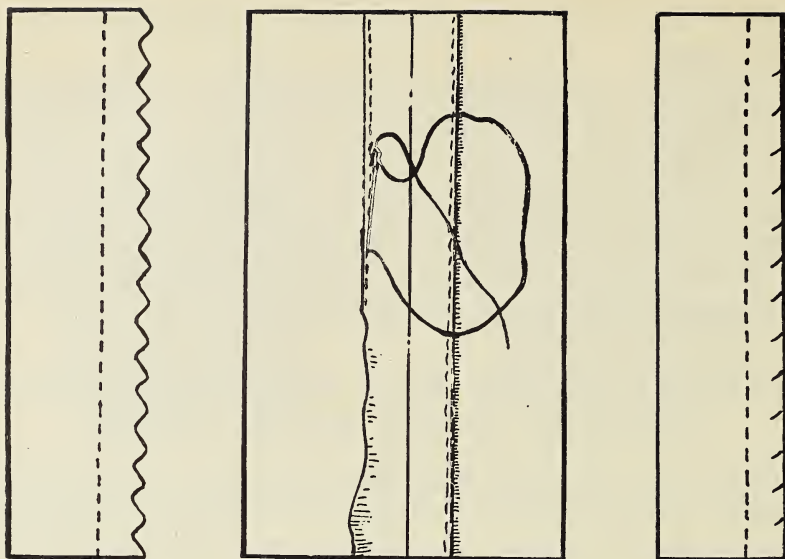
As a garment is fitted, the desired lines and areas are obtained by the temporary joining of pieces of material. The fitting and basting are means of temporary joining. In order to secure permanence of the fit thus made, the pin fitting and basting must be replaced by permanent stitching that will hold the pieces of material firmly. Such permanent stitching is known as forming a seam. Usually in the construction of a garment the seams are made by machine stitching. Various finishes are used on the seams, depending upon the character of the fabric and the design of the dress.

Seams and seam finishes. *The plain seam.* When the plain seam was made in the pinafore, you learned only one way to finish the seam. Now we will learn various ways of finishing plain seams, and you will be able to make a choice when necessary.

Pinked edges are used if the fabric will not ravel excessively. This finish is quick and easy, and hence eliminates any extra handling of the material. It is widely used on all fabrics that do not ravel, especially on silk, synthetic materials, and wool.

Self-stitched edges are made by pressing the seam open and turning under one-eighth inch of each seam edge, and then stitching along the fold, either by hand or by machine. Such finishes are used for some cottons, silks, rayons, or lightweight wools.

Overcast edges may be used either with the seam flat pressed and the edges overcast separately or with the edges overcast together. This finish may be used for materials which are not sheer enough for seams to be visible, the edges of which would fray. Picot edges, machine made, are a satisfactory finish for sheer fabrics that warrant extra cost for the finish.



Finishes for plain seams. *Left:* Pinked edges. *Center:* Self-stitched edges. *Right:* The two raw edges overcast together.

For bound edges, open seams, and closed seams, press the seam open if it is to be bound open, or press it flat if it is to be bound flat. Bind the edge of each layer of the seam for the open seam, or both edges together for the closed seam. Thin, flexible taffeta binding ribbon, one-half inch wide with selvages, is sometimes better than bias because only two thicknesses are added to the edge. Crease the binding not quite in half with an iron, leaving one side a little narrower than the other. Place this over the edge with the narrow part uppermost; first pin, then baste, and stitch close to the edge, by either machine or hand. Do not hold the binding tight or draw the thread too tightly. Silk and wool seams are often bound.

False French seam. The false French seam is so called because it somewhat resembles a French seam. It is used as a finish for a plain seam in thin or medium-weight material, for the armhole finish, for silk garments, and as a finish for the lapped seam.

The construction of the false French seam proceeds in the following steps:

1. Make a plain seam.
2. Trim the edges even to within three-eighths to one-half inch of the stitching.
3. Turn the two edges of the seam in toward each other.

4. Overhand the folded edges together or stitch them by machine or by hand with a running stitch.

In order to meet accepted standards, false French seams should be even in width, the edges should be evenly turned in, the seam should not be heavy, and the first stitching should be even with the tension right.

Standing fell seam. The standing fell seam resembles the French seam in appearance but is made similar to a fell seam. It may be made with two machine stitchings, one machine stitching and one hemming stitch, or a foot hemmer with just one machine stitch.

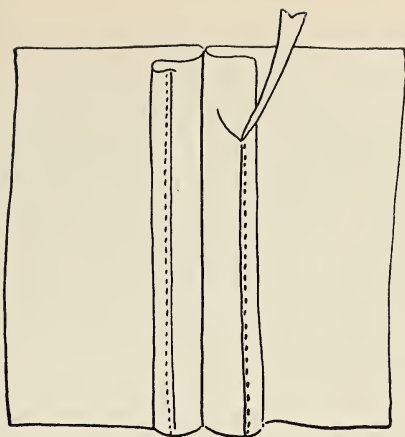
It is commonly used in ready-made garments and is particularly satisfactory for the kimono-sleeve type of garments. It may be used in places where the French seam would be satisfactory but where its construction is too difficult.

The construction of the standing fell seam proceeds as follows:

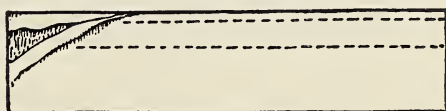
1. Stitch two pieces of material together.
2. Trim the edges to five-sixteenths and one-eighth inch respectively.
3. Instead of laying the folded edge flat on the garment as in a stitched fell, bring it back again on, or just outside, the first stitching.
4. Stitch the folded edge in position.

In order to meet accepted standards, the standing fell should be one-eighth inch wide and even in width when finished. The narrower edge should be well covered and the folded edge should be securely fastened in position.

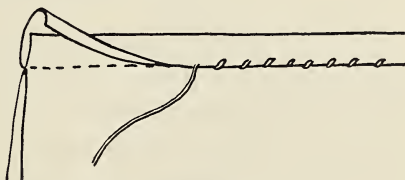
Joining skirt and waist. The skirt and the waist must be joined. A lapped seam gives the flattest results and is easy to handle. The skirt is



The plain seam pressed open and bound.



The false French seam.



The standing fell seam.

usually lapped onto the waist. If added strength is desired, it may be stitched twice, or stitched first with an inside stitching, the seam turned downward, and a second stitching made on the right side close to the folded edge. The waistline of both the skirt and the waist may be accurately marked as each part is tried on. A tape is placed snugly around the waist and a chalk mark made at its upper edge. When the two garment parts are finally joined, the underarm seams and center front and center back of the two garment parts coincide. The fullness usually found at the waistline may be held by means of gathers or darts.

SUGGESTIONS TO THE CLASS

1. Examine a group of dresses, both ready-made and home constructed, for type of seam finish and type of neck finish used. Note the construction. Which finish seems to you most satisfactory from the standpoint of appearance? Which from the standpoint of durability?
2. Make samples showing the different ways a plain seam may be finished.

9. *How may the neck of a dress be finished?*

After the seams of the garment have been stitched and finished, the finish of the neck is then undertaken. The two finishes most commonly used are facings and collars.

Facings. Shaped facings are frequently used as decorative features on certain types of dresses.

In making the pinafore the facing was turned to the wrong side, but many times it is turned to the right side, thus making a trimming. Additional trimming may be added by piping or stitching in a contrasting color.

The piping of contrasting material may be inserted under the edge of the facing before it is stitched. Bias or fitted facings are used to finish necklines and flowing sleeves of medium- or lightweight materials. When facings are used on heavy materials, they are usually of ribbon or lightweight silk. Wide, fitted facings are less difficult to manipulate than narrow ones, and in general are a more satisfactory finish.

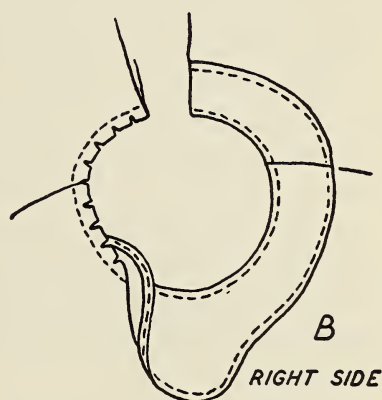
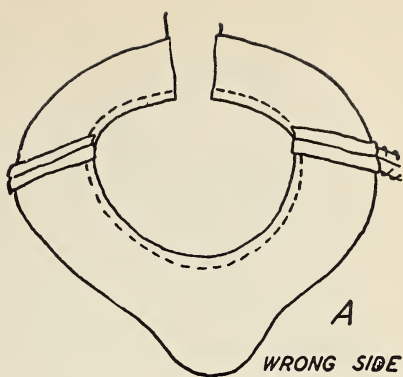
Bias facings are more difficult to apply than fitted ones, and it is recommended that the latter be used wherever possible.

Collars. Collars are of many types. They may be flat, rolled, standing, high, low, or intermediate in relation to the neck. There are single and double collars.

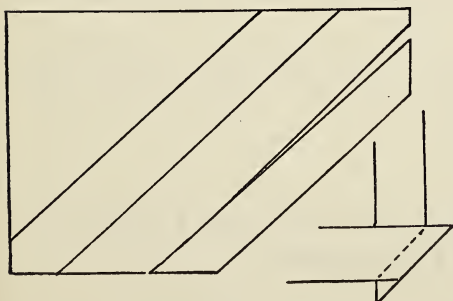
Single collars may be finished with hem, binding, or facing, as the fashion of the moment dictates. They may be applied with a fell or a French seam if the edges are nearly straight and the fabric is sheer but, as a rule, they are more satisfactory if a facing is used. The wrong side of the collar is placed to the right side of the garment and pinned along the neckline. The right side of the facing is then placed to the right side of the collar and basted in position along the neckline. Ends and center backs of collar and garment should meet. The collar and facing are stitched on by machine; then the facing is turned down flat against the garment and the raw edge turned on the seam allowance. The facing is basted and fastened by hand.

Double collars are made by basting the collar and lining, right sides together, with edges meeting at all points, then stitching them along the seam allowance on all sides except that to be attached to the neckline.

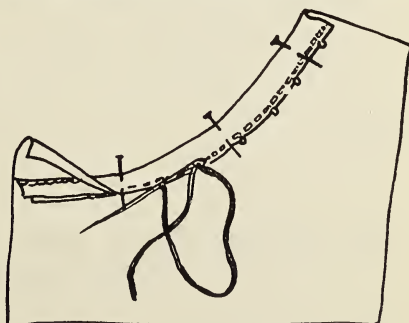
Outside corners are cut off in a triangle with the base almost to the point of the stitching; diagonal corners should be slashed or notched so that



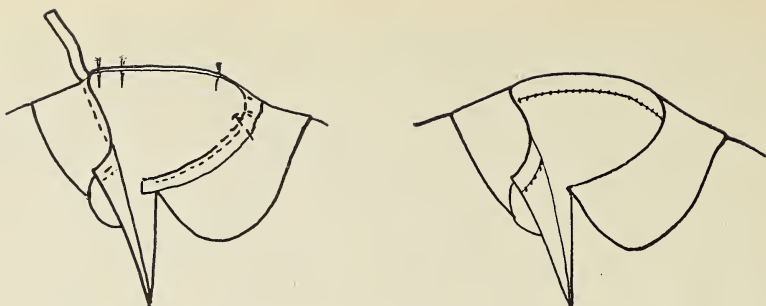
The shaped facing may be applied either to the right or to the wrong side of the garment.



Marking and joining short bias strips.



A bias facing may be applied to a curved edge.



Attaching the collar with the bias facing.

the seam will lie smoothly when it is turned. The seam should be trimmed to a uniformly narrow width, and the collar should be turned right side out and creased and pressed with the fold exactly on the seam.

Collars should lie smoothly. The grain of the material should be the same in the collar and lining. Seams should be narrow and inconspicuous. The ends of the collar should be of even length, or sufficiently different to show that the variation is intentional, not accidental.

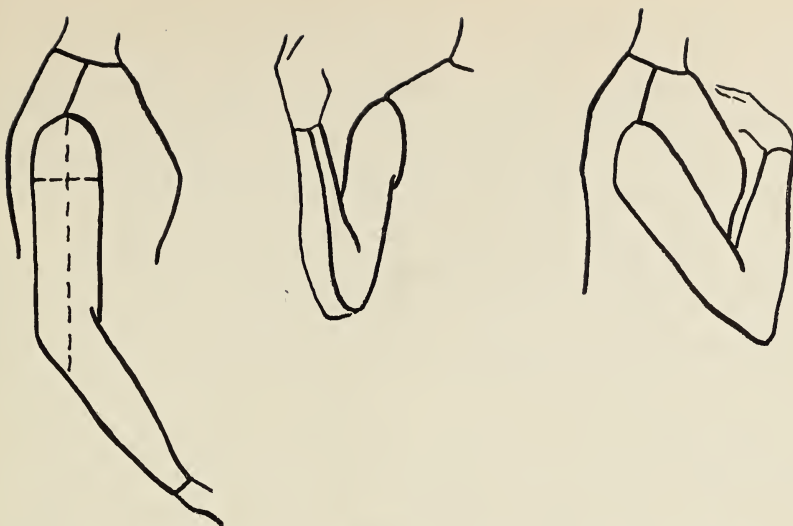
Double collars may be attached to the garment with a facing by the same method as used with the single collar. Precautions must be taken that the edges of the collar, neckline, and facing are even, and that the finished edge of the collar is held so that the crease remains on the line of stitching.

SUGGESTIONS TO THE CLASS

1. Cut a fitted facing to fit an edge similar to a neckline, and apply the facing.
2. Demonstrate a method of cutting and joining strips of striped fabric. What precautions must be observed in making the seam?
3. Examine several garments on which convertible collars are used. How is the facing applied to the neckline?
4. Bring in a number of illustrations showing various types of neck finishes including bindings, facings, and collars. Also bring illustrations of sleeve finishes.

10. How shall the sleeve be set in position and finished?

The fit of a sleeve depends in a large measure upon the type and the cut of the pattern in relation to the figure of the wearer. The two most



Left: The direction of warp and filling yarns in a properly placed set-in sleeve. *Center:* The proper position for the underarm seam. *Right:* Sleeve with ample fullness to provide for bending the arm.

common types are the set-in and the kimono sleeve, although there are many variations of each. Some of these are better suited to certain types of figures than others. For example, raglan sleeves have a tendency to make the wearer look round-shouldered, and set-in sleeves are more satisfactory on stout figures than are kimono sleeves. Set-in sleeves break the line at the shoulder of a garment and allow the waist to conform somewhat better to the lines of the figure under the arm. Long, slight arms require sleeves that are almost straight, whereas muscular or fleshy arms need sleeves that are more curved on the underarm seam and have more room for the bend at the elbow.

Even though the correct type of sleeve is chosen, the proportions of the pattern may not be the same as those of the arm. For example, if the top curve of the sleeve is too high or too low, the sleeve will not fit well unless it is carefully altered.

The kimono sleeve. The kimono sleeve, which is cut in one piece with the dress or blouse, requires little fitting. If a long, fairly close-fitting sleeve is desired in a kimono dress, a small dart is needed at the elbow on the underside. This provides more fullness and, therefore, more freedom. This type of sleeve should never be made tight at the underarm. The kimono sleeve should not be overfitted. Its success lies in its freedom of line and in the ease of its fit. If it is correctly fitted, a fold will begin near the tip of the shoulder and fall straight to the waist-

line in both the front and the back. This fold should never be fitted out.

The set-in sleeve. The set-in sleeve is the most difficult to fit. The simplest style and the one that gives the least trouble is the shirt sleeve, which is used on some service dresses and on middy blouses, men's shirts, and children's clothes. It is not so trim as the more snugly fitted set-in sleeve, but the looseness is desirable for these garments.

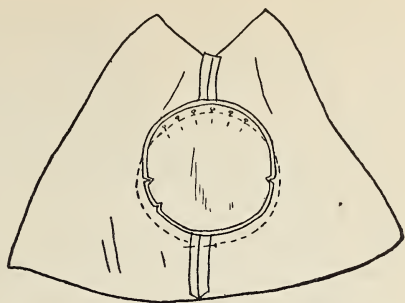
When properly cut and fitted, the set-in sleeve should hang straight from the tip of the shoulder. Neither the waist nor the sleeve should feel tight or draw at any place when the arm is in any natural position. If the correct points on the sleeve and armhole have been used in setting in the sleeves and if they were cut carefully, the lengthwise threads of the cloth will run in vertical lines from the top of the shoulder to the elbow. Also, the crosswise threads will run parallel to the floor at the level of the armpit. When sleeves are properly fitted, the one who wears them will be able to place either hand on the opposite shoulder without discomfort. There will be ample length from elbow to wrist in this position or when the arm is bent. Also, there will be sufficient length from the elbow to the back of the armhole; otherwise the sleeve is likely to pull at the armhole before the garment is worn out. The inside sleeve seam should be in line with the thumb when the hand hangs naturally at the side.

The basis for a satisfactorily set sleeve is a well-fitted waist with shoulder seam, armhole-line, and the underarm seam all correctly placed. Error in the determining of any one of these lines makes impossible a satisfactorily set sleeve. If the waist has been well fitted with these lines carefully and accurately determined, then the placing of the sleeve in position becomes somewhat simpler.

A simple precaution by which accuracy in sleeve placement may be obtained is to mark with a basting thread the seamline of the armhole as corrected by fitting. Then baste the seam of the sleeve the width of the seam allowance. Before placing the sleeve in the armhole, check its markings to verify its placement as the right or left sleeve. The markings on the pattern afford positive identification for the right and left sleeve. There are a few sleeve patterns cut short in front and long in back, so that their identification is simple. However, today there is, in general, great similarity between the front and back of the sleeve, and regard for the marks of identification given by the pattern maker remains the safest guide, at least for the beginner. If no alterations have been made, the notches on the pattern may be used for placing the

sleeve; however, a sleeve does not always fit well if the pattern markings are used, so they should not be relied upon too much.

Method of procedure. When the sleeve is set in position, the filling threads should run parallel to the floor and the warp threads perpendicular to it. A satisfactory method of procedure in the placement of a sleeve follows:



The method of pinning and basting in the sleeve.

1. Measure the seamline of the sleeve and the armhole to insure that the sleeve is $1\frac{1}{2}$ to 2 inches larger than the armhole (for the plain set-in sleeve).
2. Locate the highest point of the armhole and mark it.
3. Fold at this point and mark the lowest point directly opposite, and also the quarter points between.
4. Locate and mark the highest point, the lowest point, and the quarter points of the sleeve.
5. Place two rows of fine gathering over the upper half of the sleeve.
6. Place the sleeve in the armhole, right side out, holding the sleeve side of the seam toward the worker.
7. Match and pin the highest and the lowest points of the sleeve and armhole.
8. Allow slight fullness in the lower half.
9. Ease in the upper half, and pin, distributing fullness evenly.
10. Baste the sleeve in place.
11. After fitting, stitch along the seamline.
12. Trim seam to one-fourth to three-eighths inch, and pink or overcast the edges.

Remedying defects. Some of the defects found in sleeves and the methods of correcting them are as follows:

Sleeve too large at armhole. This difficulty is not likely to occur unless the armhole of the blouse has been made smaller than the pattern. If the difference is less than one inch, take out the extra width at the sleeve seam. If more than one inch needs to be taken out, recut the sleeve after altering the pattern so that half of the excess width is taken from the underarm seam and the remaining half from the center of the sleeve.

Sleeve too large at bottom. Widen the seam until the sleeve is the desired width. If a tight-fitting sleeve is wanted, fold a dart from the wrist to the elbow as follows:



The sleeve that twists has been incorrectly placed in the armseye or incorrectly cut.



The sleeve that wrinkles from the tip of the shoulder to the underarm line is cut too short in the cap.

Draw a line from a point $1\frac{1}{2}$ inches back from the center fold of the sleeve at the elbow to a point one-half inch in front of the center fold at the wrist. This line is folded over on the back of the sleeve until a large enough dart has been taken to make the sleeve fit in the lower arm closely. Gradually increase the width of the sleeve seam from top to bottom.¹

Twisting sleeve. The sleeve may be set in the armseye incorrectly, the straight of the pattern may not have been kept on the straight of the material when cutting, or the pattern itself may be at fault. If the sleeve twists toward the front, open the seam of the sleeve and the lower half of the armseye seam and raise the back of the sleeve on the front about one-half inch. If the sleeve twists toward the back, raise the front on the back in this same way.

If the sleeve pattern has not been placed correctly on the material, recutting it and piecing the edges, or recutting the sleeve from new material, is the only remedy.

Sleeve wrinkling from top to underarm. The crosswise threads of the sleeve curve upward across the arm at the level of the armpit, folds appear from the top of the sleeve to the underarm, and the sleeve hangs out at the elbow. The shirt or middy-blouse sleeve hangs this way naturally and should not be altered. In other types of set-in sleeves, too slight a curve on top is one cause of such wrinkles and should be corrected. Sometimes the distance from the top of the shoulder to the level of the armpit is shorter on the pattern than on the figure. Recut the sleeve, making the curve higher on top, or cut the curve of the sleeve lower under the arm. Either of these methods will make the sleeve higher on top.

Another cause for these wrinkles is that the sleeve may be too large around the arm at the level of the armpit. Increase the width of the sleeve seam and cut the sleeve curve lower under the arm. This prevents the armseye from being made too small as a result of a combination of these two causes, and both must be corrected.

Sleeve draws across top above level of armpit. Whatever the cause of this defect, first be sure the armseye line

¹ Adapted from *Fitting Dresses and Blouses*, Farmers' Bulletin 1530, U. S. D. A.

is correct. The sleeve may be in the wrong arm-hole or it may not be set in correctly. Another cause for this defect is that the top curved part of the sleeve is too narrow for the width of the arm. If the width and length of the sleeve permit, raise the sleeve in the armhole until the top curve can be widened by rounding off the top and cutting the sleeve lower under the arm. This shortens the sleeve.

If the sleeve can be recut from new material, split the pattern through the center from top to bottom and spread it apart half the needed amount. Add the remaining half at the sleeve seam. Cut the curve over the top as much higher as the pattern was spread through the center, and make the back curve on the sleeve higher for a fleshy arm than for a slender one. For example, if the sleeve is to be made two inches larger around, add one-half inch to each side of the sleeve seam edge, spread the pattern apart one inch through the center, make the curve over the top one inch higher, and gradually slope it to the underarm line. This may make the top curve too high. Fit out the extra amount when adjusting it in the armscye. If the extra width is not needed at the seam, however, use the original seamlines.

Sleeve binding at back of armscye when arm is bent. The waist may be too narrow across the back, or the back curve of the sleeve at the armscye may be too low. This defect is very often found in fitting large, plump arms. The only remedy without cutting a new sleeve is to let out the seam at the back of the armscye if possible. If a sleeve is cut from new material, make the back curve from one-half to one inch higher, decreasing the added width gradually over the top.

Sleeve not hanging straight from shoulder. The fullness over the top of the sleeve may need to be readjusted; or the whole sleeve may need to be ripped out, the quarter points located, and the sleeve reset.

Sleeve too short over elbow when arm is bent. This fault will be found when a fleshy arm is fitted or when the sleeve length from armscye to elbow or from elbow to wrist is too short. The best remedy is to recut the sleeve, making the back of it longer by extending the curves at the top and bottom. If the sleeve cannot be recut, add wider cuffs, bands, or trimming around the bottom of the sleeve for length.



Horizontal wrinkles across the sleeve cap are often due to the sleeve cap's having been cut too narrow.



Left: A sleeve which binds at the back of the armscye produces horizontal wrinkles across the armscye seam. *Center:* When the seam is ripped, the line of stitching spreads. *Right:* A new armscye line is established on the back. The depth of the seam is decreased on the sleeve as well.

Sleeve too tight around upper arm. If the arm is very fleshy above the elbow, more fullness is often required in the sleeve than needs to be allowed over the top. If the sleeve has been so cut that seams cannot be let out, a gusset may be set in the sleeve seam from the armpit to the elbow, with the point placed at the elbow. In order not to change the size of the armscye, a small pleat may be placed directly under the arm and pressed flat. This gives freedom for the arm and makes for a better appearance than would gathering this added fullness into the armscye.

If the sleeve can be recut, one method of providing the desired fullness is to add one inch to the back of the sleeve at the top. Gather this extra inch into the first two or three inches of the sleeve seam. This slight fullness is not visible when the sleeve is worn. Another method that may be used when cutting the sleeves is to curve the sleeve seam edges slightly outward between the armscye and the elbow.

If the sleeve is not close-fitting at the bottom, cut the pattern through the center from the bottom to within one-fourth inch of the top and spread it the necessary amount.

None of these three methods changes the size of the armscye edge of the sleeve.

Sleeve puffs at top. The fullness may not be well adjusted, the armscye may not be correctly located, or the top curve of the sleeve may be too high. If this curve is too high, rip out the top half of the armscye

seam and take a wider seam in the top of the sleeve but not in the armscye of the dress.

Sleeve puffs at back or front near armscye. If the armscye is correctly located and the sleeve puffs in the back at the armscye, the back curve of the sleeve is too high. Rip the necessary portion of the seam, and make a wider seam in the sleeve but not in the dress. Be careful to allow ample room for arm movements. If the sleeve puffs in front at the armscye, alter in a similar manner.

Sleeve wrinkling from armpit to elbow. The armscye curve of the garment is too high under the arm for the shape of the sleeve. Rip the lower half of the armscye seam and allow the sleeve to fall into its natural position, thus causing the wrinkles to disappear. Rebaste in this position. The seam in the sleeve should remain the same width, while that of the armscye of the dress will be lowered and widened directly under the arm.

Sleeve too long or too short. If the sleeve is close fitting and is too long, take two horizontal tucks in the pattern, one halfway from the elbow to the bottom, the other halfway from the elbow to the underarm level. Recut the sleeve from the altered pattern. Length may be added by cutting the sleeve longer at the bottom, keeping the same line as that of the pattern, or by piecing down with a cuff.

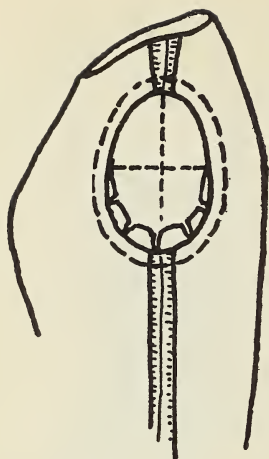
Horizontal wrinkles around sleeve at level of armpit. These wrinkles are formed by both the armscye and the sleeve being too high under the arm or by the sleeve not being wide enough just above the level of the armpit. If the armscye seam is too high under the arm, make it wider at the underarm and cut away the excess material. If the sleeve is not large enough around, let out the sleeve seam or set a gusset in the sleeve seam from the armscye to the elbow. As a last resort, recut the sleeve, making it wider on both the back and front curves without changing the length of the sleeve over the top.

Sleeve finishes. There are various finishes that may be used in completing the sleeves in various cotton fabrics. Among these are the following:

Bindings. Either single or double bias may be used to bind the lower edge of sleeves of medium- or lightweight materials. The choice be-



A gusset may be set in a sleeve that is too tight over the upper part of the arm. The sleeve is shown wrong side out.



When a sleeve wrinkles from the armpit to the elbow, the armhole in the blouse is lowered, while the sleeve remains the same length. The amount of change is indicated by the slashing in the lower armhole.

tween the single- and double-bias binding is determined by the effect desired and the fashion of the moment. Double bias is not satisfactory for heavy fabrics, because it is too bulky.

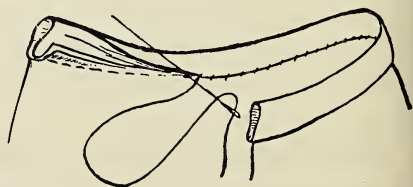
Hems. Hems are sometimes used for sleeve finishes. They can be used only on straight edges. Tailored effects may be obtained with hems about one inch wide stitched by machine or by hand. If a soft effect is desired, a narrow hem (not more than one-eighth inch wide) may be slip-stitched into position. In making even a narrow hem on a curved edge there is fullness to be dealt with which results in a poor effect.

The line for the hem should be marked, and the hem should be turned on this line and basted in position. Measured with a gauge, the turned-back material is trimmed to the width of the finished hem plus a seam allowance. In lightweight materials, a second turn is made on the seam allowance. In heavy materials, the second turn is usually omitted, and the edge is finished with seam binding.

A rolled hem, slip-stitched in place, is sometimes desirable for sheer fabrics. The fabric is rolled between the first finger and thumb into a small compact roll and permanently fastened with a hemming stitch. When the edge is bias or slightly curved, a row of machine stitching close to the cut edge prevents stretching. An edging is often applied to this type of finish.

Cuffs and bands. As a rule, cuffs are similar in style to the collar; they may be single or double, straight, flared, or turned back. The outer edges should be finished by the same method that is used for the collar. A turnback cuff should be attached with a single facing.

The size of the cuff is important; it should be large enough for comfort, but small enough to fit snugly. Unless it is to lap, the finished cuff should equal the measure-



Double bias binding may be applied as a finish for the lower edge of a sleeve. Such a finish is suitable only for lightweight, pliable materials.

ment of the bottom of the sleeve.

Fullness at the wrist or elbow of the sleeve should be evenly distributed if there is a large amount. However, it is best to avoid fullness within an inch of the sleeve seam.

Small amounts of fullness should be distributed so that most of the fullness is on the upper side toward the outer part of the arm.

Many cotton garments have short sleeves. However, occasionally the long sleeve is desired, necessitating a placket at the wrist. A satisfactory placket can be made by hemming back the sleeve seams for a depth of two and one-half or three inches. A stronger placket is the continuous-bound placket. The directions for this placket are given in the following problem. Such a placket should be finished not more than one-half inch wide. In attaching the cuff or band at the placket, the placket finish should turn flat against the sleeve, and on the lower edge it should extend into the opening. A well made sleeve placket, properly placed, is inconspicuous and does not detract from the appearance of the garment.



Making the rolled hem.

SUGGESTIONS TO THE CLASS

1. Bring to class pictures of sleeves that have been worn in the past twenty-five years. Can you notice any changes in style at different times that might give difficult problems in setting in the sleeve?

2. Try on a number of dresses or blouses and determine the location of the armscye that seems most comfortable. Can you tell how to determine a similar line on the garment you construct? How far below the pit of the arm will you place the lowest curve of the armscye-line?

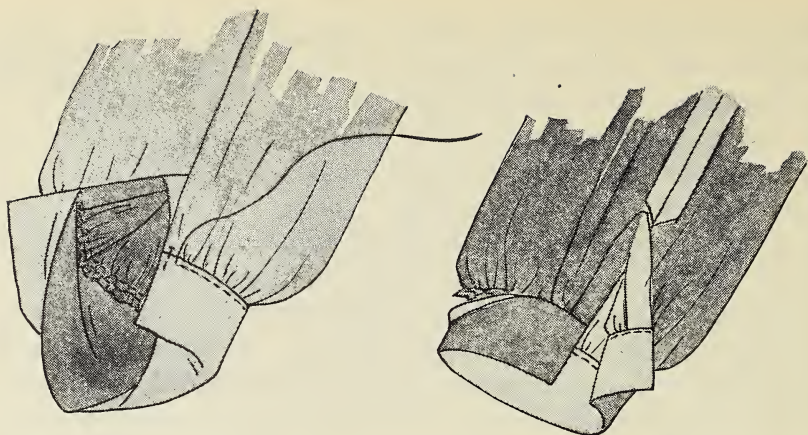
3. Observe the fit of a number of sleeves that you believe could be improved, if proper methods were used to correct their fit. What fitting difficulty do you believe most often arises?

4. Demonstrate a method that may be used in recognizing the right or left sleeve.

5. Bring to class garments that illustrate different methods of finishing sleeve seams. Which presents the best appearance? Which is the least bulky?

6. Bring to class several garments in which shoulder pads have been used. Carefully remove the pad in one shoulder and try on the garment. Can you see why the pad is needed?

7. Select several dress designs that show the detail in the dress repeated in the sleeve.



A band may be used to finish either the long or short sleeve. Such a band as is shown requires a placket.

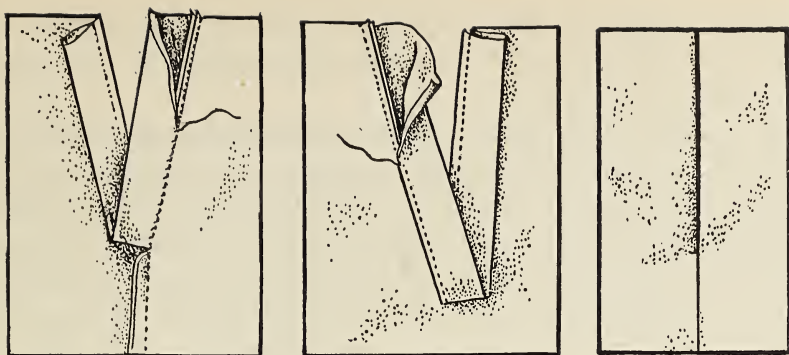
11. How shall the placket be made?

Plackets are often essential to the successful finish of a dress. Pockets, bound buttonholes, belts, and sashes may add interest, color, and style to the design.

A placket is a finished opening placed in a garment for convenience in putting it on. Plackets in outer garments should be as inconspicuous as possible unless they are to be a part of the decoration. For this reason careful pressing and attention to details of construction are especially important. Caution in handling the edges of the opening will prevent stretching and the consequent bulging of the finished placket.

Finishing. The method of finishing plackets should be chosen according to the method by which the seams are finished, and according to the type or style of the garment and its design, particularly the location of seams and decorative features. The weight and construction of the fabric are important factors in selecting a suitable placket. A well-finished placket should be flat and smooth, with as little bulk as is consistent with sufficient strength. It should be of minimum depth suitable to provide ease in removing the garment.

Depth. The correct depth of a placket is usually dependent upon the difference between two body measurements—for example, between the waistline and the distance around the shoulders or between the girth of the hand and the wrist. The depth of the placket in a skirt or in the side seam of a one-piece dress is one-half the difference between the waist



The continuous-bound placket. *Left:* Made in a seam. *Center:* Made where no seam occurs. *Right:* Placket closed.

and shoulder measurements plus one inch. Sleeve plackets are usually one-half the length of the wrist measurement. The width of the placket should be sufficient to prevent gaping when a reasonable number of fasteners are used. The distance between fasteners is dependent upon the location of the placket, the type of garment, the kind of fabric, the size and kind of fastener, and the closeness of the fit of the garment.

Location. The location of plackets depends upon the style and use of the garment. Custom dictates that women's garments lap right over the left, or front over the back, but men's garments lap left over the right. However, design or personal preference may change this rule. Inconspicuous plackets are placed on a seam or under a dart, tuck, or pleat to avoid an additional line in the design. In general, slashes are seldom made for plackets in outer garments, except at wrist or neckline. Slashes are more common in lingerie and children's garments because convenience in fastening is the most important consideration.

Continuous-bound placket. The continuous-bound placket is made either in a slash or a seam by binding the raw edge with a single strip of fabric. It is commonly used where a strong placket is needed to withstand use or laundering, but is too clumsy and bulky to be satisfactory for many purposes. It is used on undergarments and children's clothes for strength, and is frequently found on sleeves, neck, and underarm seams of cheaply made dresses. When strength is an important factor, the binding should be cut lengthwise of the fabric, because it is usually stronger than bindings cut crosswise or on the bias. In fact, bias binding should not be used unless the placket is narrow and short.

The width of the placket binding varies with the type of material and the strain to which it is to be subjected. The strip used as binding should

be twice the length of the placket plus one inch. It should be twice the width of the finished placket plus two seam allowances of one-eighth to three-eighths inch each.

The location of the placket and the method of finishing determine the manner in which the binding is applied. If the placket is made by slashing the garment, it should be cut on the thread of the material to the desired depth. When such a placket is to be finished by hand after one side has been stitched on by machine, the right side of the binding is placed to the right of the garment, with the wrong side of the garment toward the worker. The two edges are basted together. About $1\frac{3}{4}$ inches from the end of the slash, the fabric should be slipped back from the edge of the binding so that the seam on the garment tapers to a point at the end of the slit, but the seam on the binding remains the same width throughout. The narrowed seam reduces the bulk and makes it possible for the placket to lie smoothly at its point. The seam is stitched along the basting with the garment next to the presser foot so that it may be turned to prevent pleating at the end of the slit. The bastings are removed, and the seam is pressed toward the binding. Then the seam allowance on the binding is folded under and pressed. The binding is turned to the wrong side and basted in position, with the folded edge at the line of stitching. The placket is finished by hand with the hemming stitch.

If the final stitching is to be on the machine, the placket is made by basting the binding to the garment with the right side of the binding to the wrong side of the garment, and proceeding as before. The last stitching should be made directly over the first one. The underside of the placket becomes an extension, and the upper side is creased back and held in place by the finish of the upper edge of the garment.

When this placket finish is used in a seam, the procedure is similar to that on the slash except that the width of the seam remains the same for the full length of the placket, instead of tapering at the point. It is usually necessary to clip the seam at the lower end of the placket almost to the line of stitching. In this placket it is important to have the placket seam appear as a continuation of the seamline of the garment and to keep bias edges from being stretched.

Since no stitching shows on the right side of the placket, it is important to see that the seams are straight and a uniform distance from the edge of the fold. The binding should be of uniform width. The usual width for this type of placket is one-half to three-fourths inch for dresses or underwear, and three-sixteenths to one-fourth inch for sleeves.

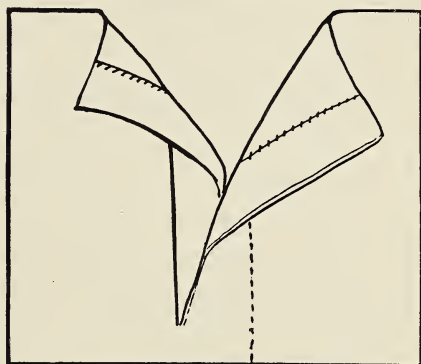
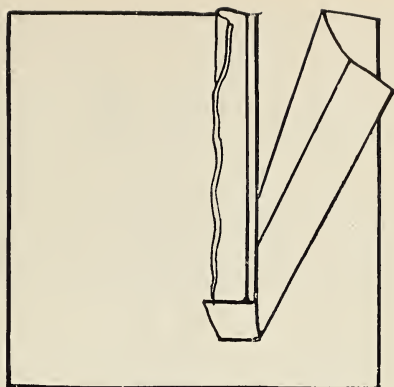
The finished placket should be smooth and free from diagonal wrinkles.

Bound and faced placket. The cut-out continuous placket is made by finishing the opening with a single strip of cloth which is used as a facing on the upper side of the placket and as a binding on the lower side. This placket is used on lingerie and on children's garments, especially panties and pajamas which have waist bands. It is not so bulky as the continuous-bound placket, but the stitching which shows on the outside limits its use in outer garments.

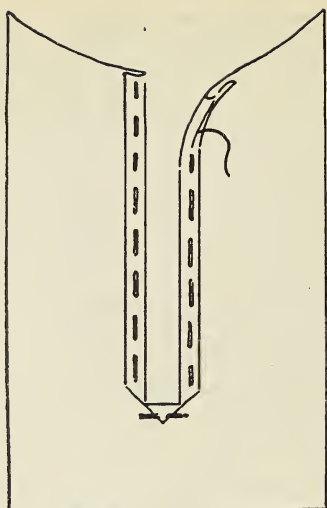
The binding and the placket opening are prepared as for a continuous-bound placket. The binding is basted and stitched as directed. The bastings are removed and the seam is pressed toward the binding. The raw edge is turned and pressed in position, and the strip is turned back as a binding on the underside

of the opening, then creased and pressed with a lengthwise fold through its center. On the upper side, the free edge of the binding is trimmed out to within one-fourth inch of the center fold and one-fourth to one-half inch of the lower end of the placket. The remaining part of the binding on this side is turned back flat against the garment and basted as for a facing. On the lower side, the free edge of the binding is placed even with the first row of stitching to form a binding. The final stitching may be by hand or by machine. The facing and binding should be smooth and even, and the end of the placket should be securely fastened.

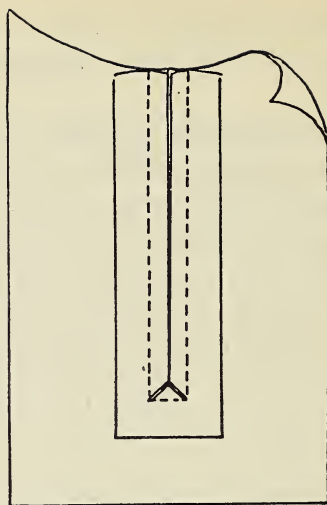
The slide fastener in the placket. Many plackets are closed with a slide fastener stitched into a slash or a seam. This placket can be used only on fabrics which are fairly heavy and firm. A fastener of the desired color and length should be purchased before the placket is



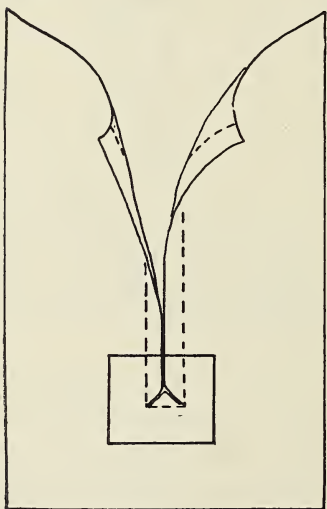
Bound and faced placket. *Top:* One side cut away from the continuous binding. *Bottom:* Facing and binding stitched in place.



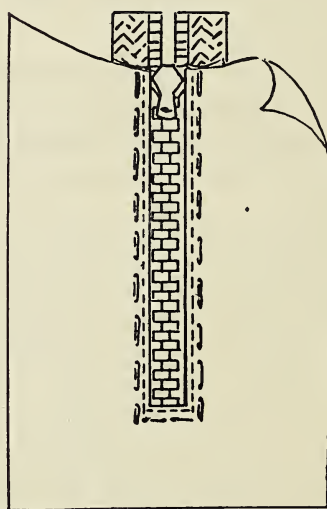
A



B



C



D

A placket finished with the slide fastener exposed. *A*: The edges of firm material are basted back ready for pinning in the zipper. *B*: The slash is faced when the material frays. *C*: The end of the slash may be reinforced and a single line of stitching placed just inside of the seamline. *D*: The finished placket from the right side.

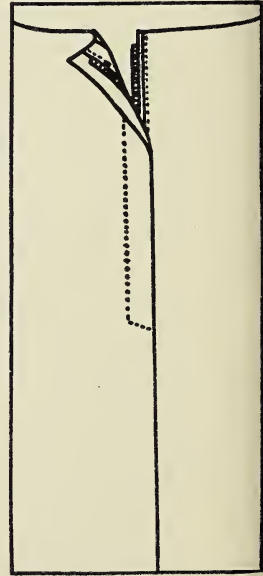
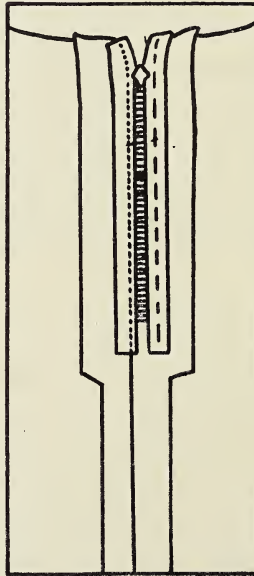
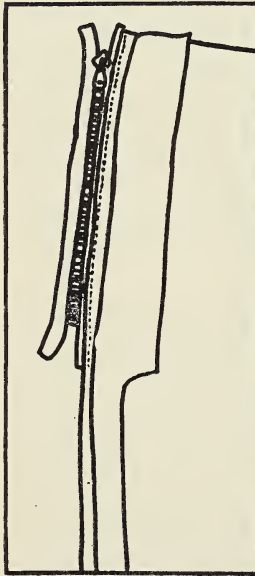
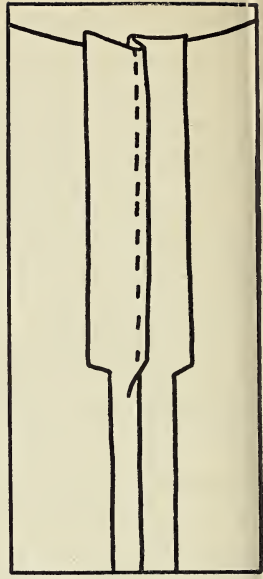
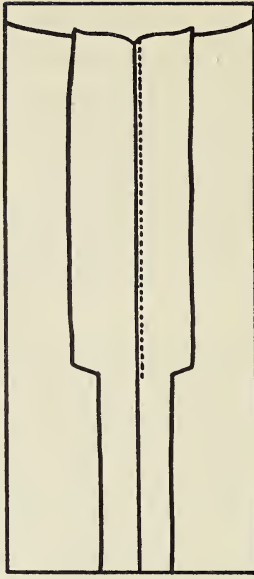
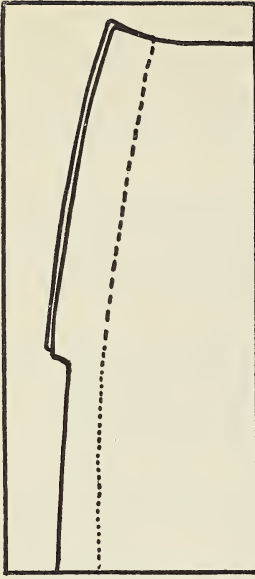
planned. Underarm plackets in both dresses and skirts are, in most cases, made to conceal the fastener. Plackets made in seams can readily be made to cover the metal part of the fastener. Even when the fastener is set into a slash at the back of the neck or at the wrist, a method has been devised to set it back of folds of fabric.

A cording foot is needed to obtain good results in stitching slide fasteners into garments. Its use makes it possible to stitch close to the metal part of the fastener. A cording foot may be had with either the left or the right prong.

Exposed fastener. If the slide fastener is to be inserted in a slash and finished with the fastener exposed, the slash should be cut exactly the length of the metal, and short slits should be made diagonally at the end the depth of the seam allowance—about one-eighth inch—to allow a smooth turn-under. The edge is turned under and pressed and basted. The zipper is then inserted and basted in position, with the end of the metal at the end of the slash. This finish is successful only when the material is firm. If the placket is the correct length, there will be a seam allowance for finishing the edge at the top of the placket. The zipper should be stitched in place with the line of stitching one-sixteenth inch from the metal. Care is necessary to avoid injury to the feed and cording foot of the machine and to insure an even stitching a uniform distance from the edge. Best results will be obtained by adjusting the tension for a perfect stitch and then placing the placket in the machine with the zipper tape next to the feed. Do not clip off the excess length of the tape, but fold it back at the top to reinforce the end of the stitching.

To make a placket in loosely woven material with an exposed slide fastener, it will be necessary to face the slash. Sometimes the facing is made throughout the entire length. At other times a small reinforcement at the end of the slash serves to prevent fraying. In either case, a rectangle the width of the metal or plastic part of the fastener is stitched, preferably before the slit is cut, and then the slash is made and the facing is turned to the wrong side and basted. Great care should be taken to turn under all of the facing to avoid a clumsy finish. The neckline or wristline from which the slash is made should be finished appropriately. Usually a facing is most satisfactory in that it takes care of the ends of the zipper tape. (See drawing on p. 420.)

There is another method commonly used for putting in the slide fastener which has proved comparatively easy for many and which gives much assurance of a neat, well-finished piece of work. If the fol-

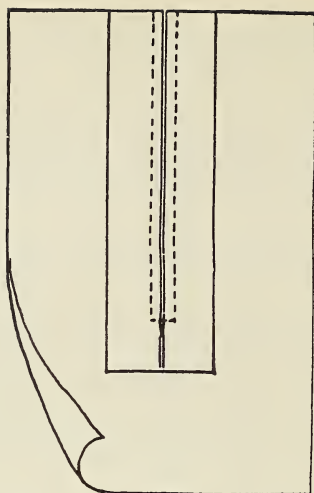


A zipper placed in a seam, where the seam has been stitched.

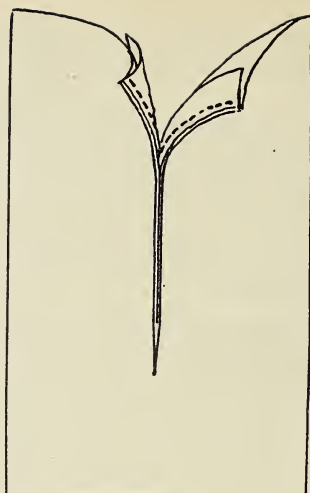
lowing steps are carefully read and followed, you will find it an easy method when putting in a slide fastener in a skirt placket.

1. Cut left side of skirt side seams (both front and back) $\frac{3}{4}$ inch wider than seam allowance and 1 inch longer than the length of the slide fastener.
2. Stitch a row of machine stitches $\frac{1}{16}$ inch outside the seam line on front section.
3. Stitch left side from hemline to beginning of placket opening and fasten thread ends.
4. Lengthen machine stitch as much as possible, and finish stitching the seam to waistline.
5. Press seam flat on inside with the raw edges turned toward center front of the garment.
6. Extend back of side seam $\frac{1}{8}$ inch and press flat the length of the slide fastener tape.
7. Place fold on right side of slide fastener, close to slide (allow space for top of fastener to run on slide), pin, baste, and machine stitch.
8. Open seam with the slide fastener placed flat against skirt front section of seam allowance. Hold flat and pin and baste parallel to metal slide, allowing sufficient width to cover the pull.
9. Stitch on the outside on the basted line the length of the slide fastener parallel to the side seam and across the bottom of the tape and fasten thread ends.
10. Remove long stitches that closed the seam being careful to remove all short threads.

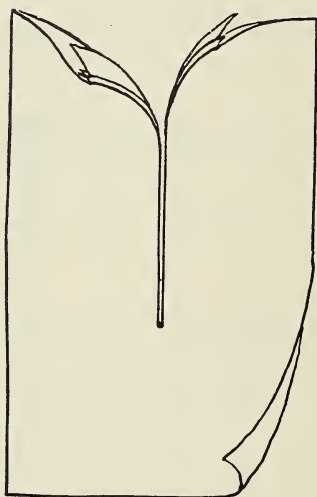
Fastener for neck or wrist placket. A placket with the slide fastener concealed is often used in the back of the neck or at the wrist. The position of the slash is marked with a line of basting but is not cut. Two warpwise strips of fabric one inch wide are cut one inch longer than the placket. Strips cut along the selvage are often most satisfactory. These are laid right sides toward the right side of the garment with the raw edges touching the marked line and are basted in place. The facings are stitched one-eighth inch from the line of basting, exactly the length of the metal part of the fastener. The slash is cut, and a tiny tapering tuck about one-half inch in length is made on the wrong side of the garment at the end of the slash. This serves to bring the two rows of stitching together at the base of the slash. Careful pressing makes this tuck practically invisible. Next the seams are pressed open, and the facings are turned to the wrong side and basted so that they are not visible from the right side. The facings are then carefully pressed. The fastener is now pinned in place, the upper edge of the slide being held



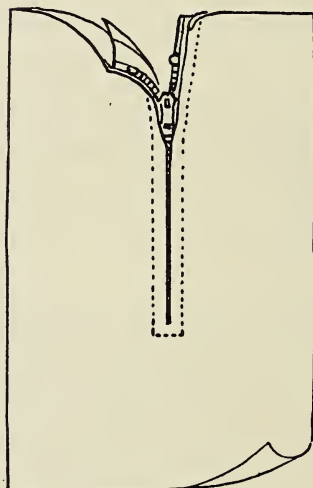
A



B



C



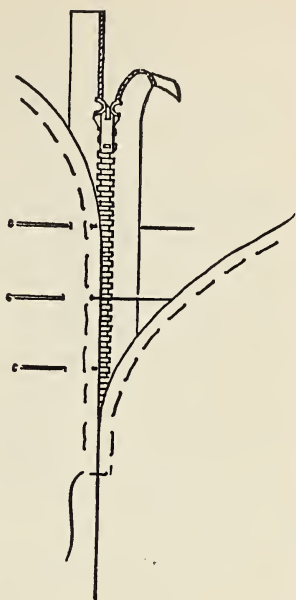
D

The concealed zipper closing used in the back of the neck. *A*: The two strips applied to the right side of the garment and stitched in place. *B*: the wrong side of the garment after the slash has been cut, showing the tiny tuck taken at the end of the slash. *C*: The right side of the garment after the facings have been turned to the wrong side. *D*: The right side with the zipper basted in place.

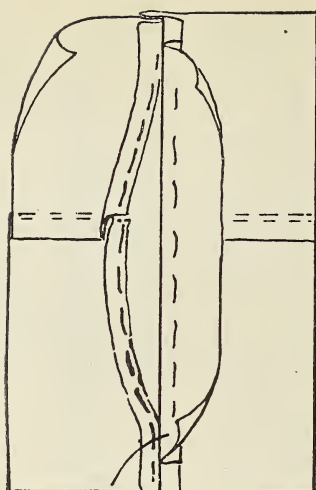
about one-half inch from the raw edge of the neckline or wristline. The faced edges are brought together or are permitted to more than touch. When the fastener has been basted in place it is stitched. The right side of the garment is held uppermost and the lines of stitching are carefully placed to avoid the metal strip and to provide ample width for the slide to be moved up and down.

Concealed fastener. A concealed fastener may be located in a seam or in a full-length opening. One method of constructing such a placket results in a closing that looks like a slot seam. To make such a placket, the seam should be three-fourths to one inch in width. A line of machine stitching is made one-sixteenth inch beyond the seamline into the seam allowance. This serves to prevent stretching the bias line. The seam is turned back on the seamline so as to fold under the line of stitching, and is basted and pressed. The slide fastener is pinned in position while the garment is being eased slightly onto the tape, and then is basted. From one-fourth to three-eighths inch is necessary to prevent the fastener buckling. The placket is placed right side up under the machine and is stitched a distance from the metal that will allow the slide to be moved up and down. (See drawing above.)

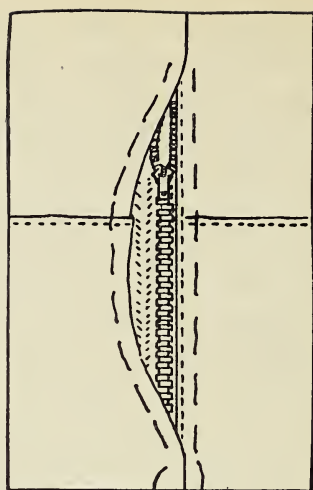
A slide fastener placket in general use in the underarm seam of a dress is one constructed so that a single fold of the fabric conceals the slide fastener. (See drawing on p. 426.) An opening is left in the left side of the garment, one-half inch longer than that of the fastener. Common lengths of zippers for this purpose are nine and eleven inches. The fastener suited for this purpose is closed at both ends. The seamline is marked with a basting on both the back and the front of the opening. The front is faced with a one-inch strip of fabric which is cut along the selvage and which is at least one and one-half inches longer than the opening. Grosgrain ribbon may be substituted for self-material. If the line of stitching is placed one-sixteenth inch into the seam allowance, the facing will be completely hidden when it has been turned, basted, and pressed. When there is a seam allowance of one inch on the



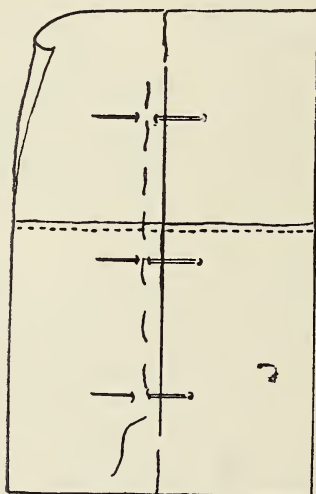
The concealed zipper located in a seam. The seam allowance is turned back on the seamline and the zipper is pinned and basted in place.



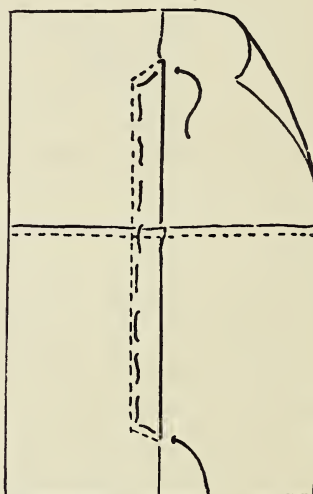
A



B



C



D

A zipper placket for the underarm seam of a dress. *A*: The wrong side of the garment, showing the front edge of the placket faced with a 1-inch strip and the back edge turned under $\frac{1}{8}$ inch from the seamline. *B*: From the right side showing the back edge of the placket stitched to the zipper tape. *C*: From the right side, showing the front edge of the placket lapped over the back. *D*: Showing the final stitching of the placket.

front of the opening, the facing may be omitted and the seam may be turned back to form the fold which conceals the fastener. A row of stitching through the single fabric is placed one-sixteenth inch beyond the basted seamline into the seam allowance. This serves to stay the fabric and prevents stretching the bias edge.

The raw edge of the back of the opening is turned under one-eighth of an inch from the seamline and is basted. This provides a slight lap so that the fastener will not be visible. With the fastener closed, the back edge of the opening is pinned and basted to the tape of the fastener one-sixteenth of an inch from the metal, a slight amount of fullness being eased in. Machine stitching is placed at the edge of the fold.

The faced edge of the placket is lapped over the back so as to bring the two basted seamlines together, thus completely covering the fastener. After it is pinned in place, a line for stitching is marked one-half to five-eighths of an inch from the edge of the fold. The final stitching of the placket is done from the right side of the garment. The stitching across the top and bottom of the fastener may be made either diagonally or at right angles to the line of vertical stitching.

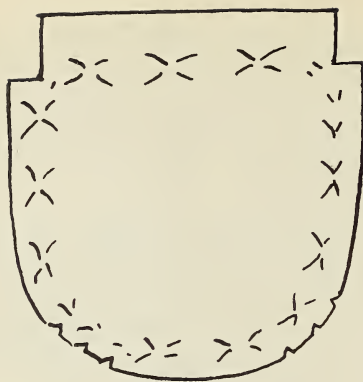
SUGGESTIONS TO THE CLASS

1. Examine the plackets of a number of ready-made garments. Classify them as to neck plackets, sleeve plackets, underarm dress plackets, and skirt plackets. Are the finishes satisfactory as to fit and workmanship? Do you find any that are not sufficiently durable for the garment?

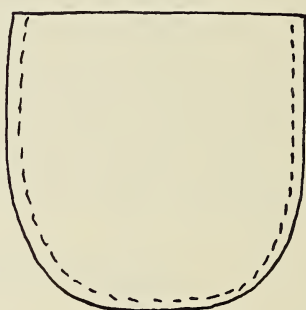
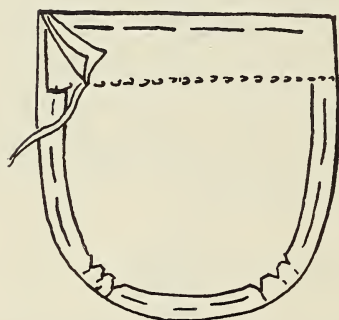
2. Choose a placket finish suitable for your dress. Make a practice placket before making the one in your garment.

12. What further steps shall be taken in completing the garment?

Pockets, bound buttonholes, buttons, belts, and various types of fasteners and hems may all be a part of the completed garment. They will probably not all appear on one garment, but consideration should be given to their use in making a dress. It is possible that bound buttonholes, for example, should be made before the placket is put in the garment. There may be other steps in the completion of the dress that do not follow the order given in the text. Your construction chart included in the pattern should be consulted for suggestions.



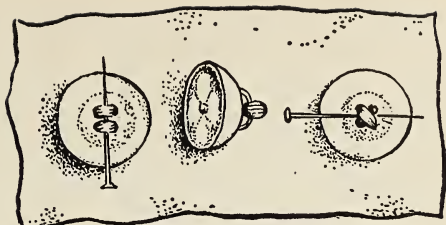
The patch pocket. *Left:* The seam's width cut away as far as the depth of the hem. *Lower left:* The hem turned down, hemmed by hand or by machine, and the seam allowance basted under. *Lower right:* The pocket ready to apply to the garment.



Patch pockets. Patch pockets are frequently used on tailored frocks. They are made by sewing a shaped piece of material to the outside of the garment. The size and shape of the pocket are planned in relation to the design. In geometrically designed materials the figure should match that in the garment unless there is a definite decorative effect intended. Any decoration or finish on the pocket is applied before the pocket is sewed to the garment. Hems or facings turned to the right or the wrong side may be used.

If a hem is used to finish the top, the seam allowance is trimmed from the sides to the depth of the hem. The hem is turned, basted, and stitched. The seam allowance on the pocket is creased with the raw edges toward the wrong side. The lower corners of the pocket are clipped diagonally to make them lie flat. The upper corners of the fold of the hem are turned diagonally downward, and the side seam allowance is folded over the hem. The pocket is basted to the garment in the correct position and is stitched close to the edge. Since there is considerable strain at the corners, the stitching may be retraced, or a double row of stitching may be made either in the depth of the hem or around the

entire pocket. It is also possible to reinforce the corners by threading into a needle the ends of threads used in machine stitching and fastening them securely with a few hand stitches. A patch pocket should be flat and smooth and firmly stitched at the corners to prevent ripping or tearing when the garment is worn.

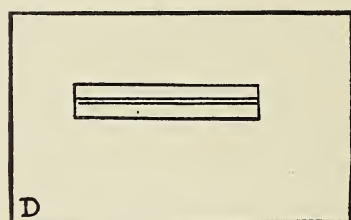
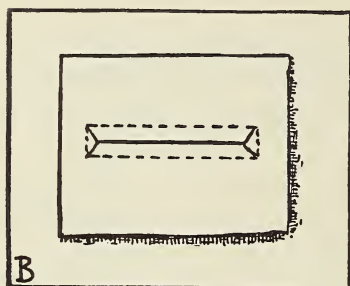
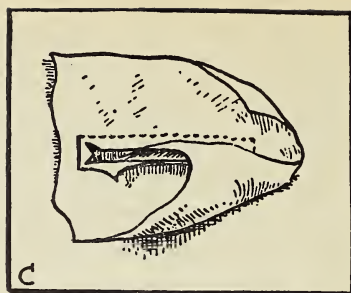
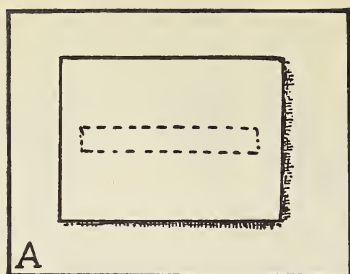


When a button without a shank is to be sewn on, a shank is made of thread. Note the use of a pin in its construction.

Buttons. Buttons may be used only for decoration, or they may be used with buttonholes or loops as a means of fastening the garment. Buttons may be obtained in a variety of materials. They are of two types, those with shanks and those with two or more holes. In purchasing buttons, one should examine them carefully for smoothness of finish and strong construction. Rough, sharp holes or shanks will cut the threads fastening the button. A weak shank is easily pulled out.

If buttons are used only as decoration, the location of each should be determined and marked by chalk or pins. If they are to be used as fasteners, they should be sewed on after the buttonholes are made so that the exact position may be located. The opening of the garment should be lapped in the correct position, and the location of the buttons should be marked at the outer end of the buttonhole by means of pins, chalk, or a basting thread. The positions for all buttons should be marked before any of them are sewed on.

The method of sewing on buttons varies somewhat with the type of button. If a flat button is used as a fastener, a shank must be made with thread in order that the buttonhole may lie flat beneath the button. A heavy single, medium double, or a heavy double thread is satisfactory for sewing on buttons. A small stitch on the right side of the garment, which will be covered by the button, is used to fasten the thread. The needle is passed up through a hole in the button and down through the other hole to the wrong side of the button, and a pin is slipped under the stitch. If a two-hole button is used, stitches should be parallel with the button hole to prevent it from spreading. The sewing is continued until the button is securely fastened, each stitch being made over the pin. Then the needle is brought out between the button and the fabric, the pin is removed, and the button is pulled to the top of the loop. The thread is then wound around the loose stitches to make a firm shank



A method of making bound buttonholes. *A*: Binding basted and stitched on the right side. *B*: Buttonhole cut. *C*: Binding pulled to the wrong side. *D*: Completed buttonhole as seen from the right side.

and is fastened on the wrong side of the fabric with several small stitches.

Bound buttonholes. Bound buttonholes are a decorative feature in garment construction and are used on outer garments to a much greater extent than “worked” buttonholes. Exceptions are the child’s dress or cotton frocks designed for utility wear. Bound buttonholes are often used even on the strictly tailored suit or coat in place of worked buttonholes.

The following procedure in making a bound buttonhole is suggested: Mark with a basting line the exact length and position of the buttonhole on the right side of the garment. The buttonhole may follow the thread of the material or may be placed on the bias. Cut a rectangular piece for the binding, either straight or bias, about $1\frac{1}{2}$ inches longer than the buttonhole and about $2\frac{1}{2}$ inches wide. Place the right side of the strip to the right side of the garment and baste the binding directly over the line marked for the buttonhole. With the sewing machine, stitch a rectangle around the line which marks the exact position of the buttonhole. The stitched rectangle should be so made that the two long

sides are equally distant from the basting line, and the two short sides—just touching the ends of the basting—are equal to the two welts. The welts forming the buttonhole should be from one-eighth to three-sixteenths inch wide when finished. The line of stitching which forms the rectangle should start in the middle of one of the long sides and end by overlapping the stitching two or three stitches. Square corners may be formed by pivoting the fabric on the needle at each corner.

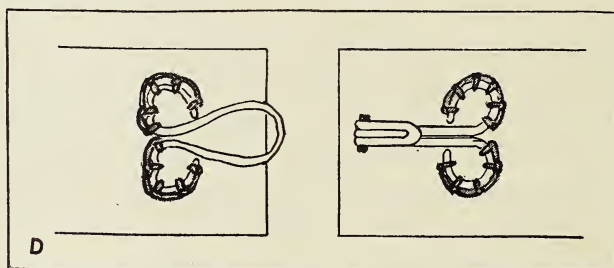
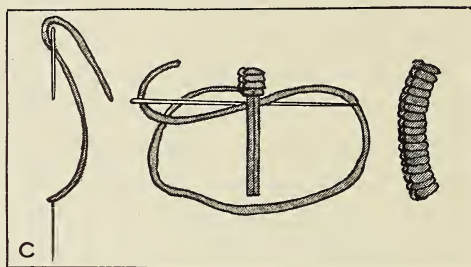
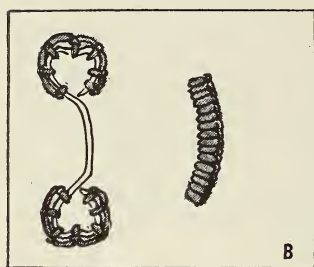
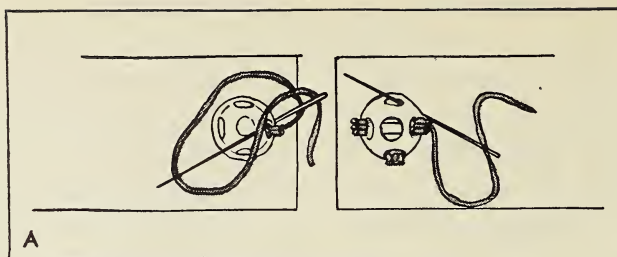
Cut along the line marking the center of the rectangle to within one-eighth inch of each end. From these points cut diagonally to the four corners to within a thread or two of the line of stitching. Turn the binding strip to the wrong side and crease it back along the line of stitching to form a distinct rectangle. Fold the binding to bring the folded edges together at the center of the greatest length of the rectangle. The cut edges are turned outward and away from the slit. The fullness at each end on the wrong side should be laid in box pleats and held in position with several stitches taken from the wrong side.

In the buttonhole that is not to be finished with a facing, the edges of the long sides, after trimming, are sometimes folded under and stitched by hand to the underside of the binding. The ends of the bound buttonhole are never turned under but are finished with overcasting.

For heavy material or in case a buttonhole is to be finished with a facing, the extra material is trimmed off to within one-half inch of the rectangle. The folded edges which form the slit for the buttonhole are catch-stitched together in order to hold them in place until the buttonhole is pressed. The buttonhole may be strengthened by the following method: With the buttonhole held right side up, fold the fabric of the garment back, thus exposing the small triangle of cloth at the end and the seams along the sides. Then place a line of stitching across one end of the buttonhole to hold the triangle firmly to the binding, and continue the stitching down along the side and entirely around the buttonhole. This stitching does not show from the right side.

For the garment which is finished with a facing, the facing is basted into place, and a slit is cut in it directly over the buttonhole. The cut edges are turned under and hemmed to the binding. A final pressing completes the buttonhole, and the catch stitch is removed.

Fasteners. The sewing on of fasteners is also important in the completion of the dress. The kind of fastener used depends upon the kind and style of the garment. However, no fastener should be attached to a single thickness of fabric. Tape may be used as a reinforcement if a flat, smooth finish is desired. The fasteners should be close enough to-



Sewing on fasteners. *A* and *D*: The buttonhole stitch is used to sew on both snaps and hooks and eyes. *B*: Both the metal eye and the thread eye. *C*: The process of making the thread eye or blind loop.

gether to prevent gaping, and far enough from the edge of the placket to be invisible. The stitches used to secure the fastener should not show on the right side of the garment.

*Snap*s. Snaps are used where there is little or no strain and where a flat, inconspicuous closing is desired. As a rule, the snaps should be invisible, but they should be placed near enough to the edge of the opening to keep it from turning back. They should be close enough together to prevent gaping. The position of the snaps should be marked with pins or chalk. The ball part of the snap is placed on the upper part of the placket and securely sewed on. Then the placket should be correctly closed and the position of the ball marked on the under part of

the placket with pins or chalk. The socket part should be sewed on with the socket directly over the mark left by the ball.

A single, heavy thread should be used to sew on snaps. A knot and a small stitch which will be covered by the snap should be used to fasten the thread. The snap is fastened in place with several buttonhole stitches in each hole, with the purled edge directed away from the snap. The needle should be passed under the snap to carry the thread from one hole to another. The thread should be fastened on the wrong side of the garment with two or three small stitches.

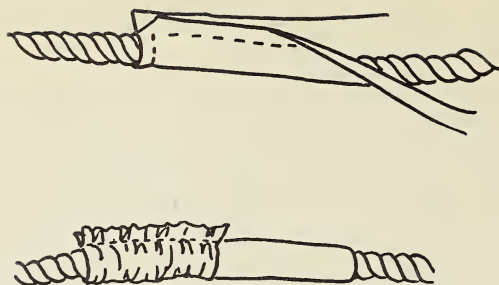
Hooks and eyes. Hooks and eyes are used in places where there is considerable strain on the clothing and an inconspicuous closing is desired. They are most frequently used on belts. They are not good for general use because they are not flat and require careful attention during laundering.

There are two types of eyes: the straight eye, used where the edges are to lap, and the round eye, used where the edges of the cloth just meet. If a flat closing is desired, a thread loop may be used instead of a straight eye.

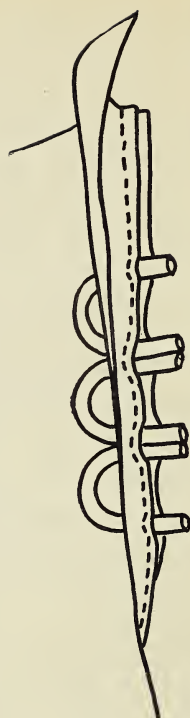
Hooks are placed on the wrong side of the upper edge of the closing, usually about one-eighth inch from the edge. The straight eye is placed directly under the outer end of the hook on the right side of the under edge of the placket. The opening of the rings at the end should turn toward the edge of the garment so that they will not spread and straighten out if there is strain. When the round eye is used, it is attached to the wrong side of the under edge of the placket and should extend one-sixteenth inch beyond the edge of the cloth so that the edges of the closing exactly meet.

The hooks and eyes should be sewed on with a single heavy thread. Five or more buttonhole stitches should be made in each of the round ends on hook and eye. The needle should then be slipped through under the metal and four or five overhand stitches made around the hook end to keep it from raising up. If round eyes are used, the eye should be fastened to the edge of the garment with three to five overhand stitches on each side in order to keep the eye from lifting upward. The thread end should be securely fastened with two or three small stitches on the wrong side. The hooks and eyes should be firmly sewed on with uniform, evenly spaced buttonhole and overhand stitches.

Thread eyes and loops. Loops made of thread or cloth are used in place of buttonholes or for slides for belts. Small thread loops are used in place of a metal eye for a hook. Thread loops are made with coarse



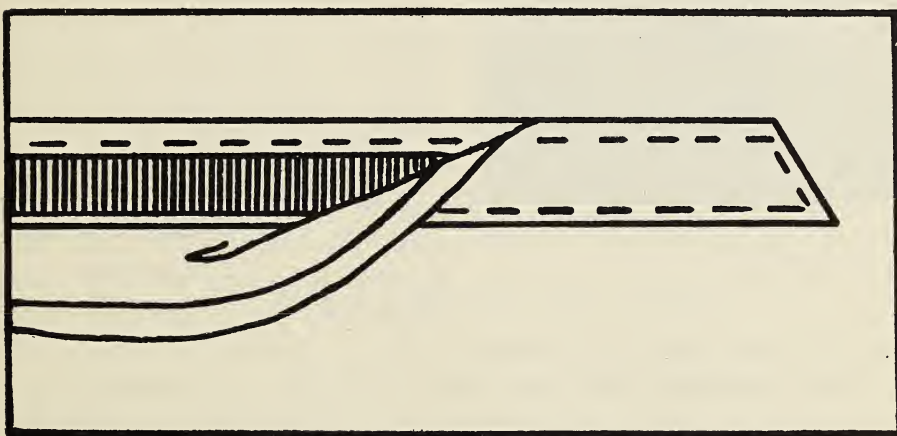
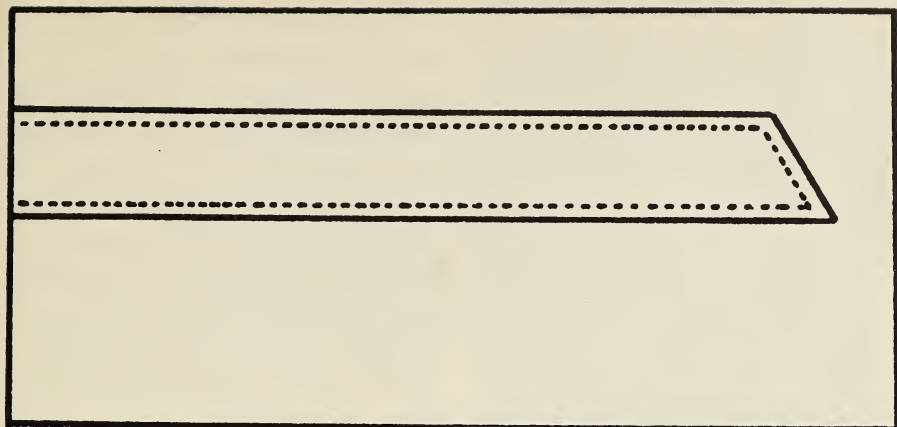
Cloth loops. *Left*: The method of making the loops; *Right*: The method of attaching the loops.



single thread after the garment edge is finished. The size of the thread depends upon the size of the loop to be made. If a thread loop is used as the eye for a hook, it should be the same size as the metal eye; if it is used instead of a buttonhole, it should be just large enough to allow the button to slip through; if it is used as a belt loop, it should be a little longer than the belt width.

In making a thread loop, three or more stitches of the desired length are made, one on top of the other, with the loop of the thread on the right side. The loops are then covered with buttonhole stitches placed very close together, and the thread end is securely fastened on the wrong side. Smooth, even stitches are essential to a well-made loop. More uniform stitches are made if a pencil or other small article is inserted under the loop. A chain stitch made from buttonhole twist may be used for belt loops.

Cloth loops. Cloth loops are always made from a bias strip, sometimes with a cord inside. A bias strip twice the desired width plus two seam allowances is cut from the fabric. The finished width should be from one-eighth to three-sixteenths inch. The strip is folded lengthwise with the right side in, and is then creased in the center and stitched the de-



This shows a method for making a belt when all the work is done on the right side. The heavy lines represent the belt lining and the upper edge of material turned over the lining. The lower part is turned under and brought up to the upper edge of the belt and fastened down.

sired distance from the folded edge. The seams are trimmed as narrow as the construction of the fabric permits. A few stitches are taken in one end of the tube with coarse double thread, the needle is passed through the inside of the tube, eye foremost, and the strip is turned on the double thread.

Loops of the desired length are cut from the strip and placed on the right side of the garment with the end of the cording against the opening and are securely fastened with a number of small stitches. The seam should be turned to the inside of the loop, because it does not stretch as much as the fabric. The ends of the loops should usually be spaced



The mechanical device used in marking the hemline.

so that the end of one touches the end of the other, and the loops should always be wide enough for the buttons. The facing is placed over the ends of the loops and stitched along the opening, turned to the wrong side, pressed, and fastened in place. A binding may also be used for applying the loops.

Braid or bias tape is sometimes used for flat, pointed loops. These loops may be stitched by hand or by machine. The strips of braid or tape are first pressed flat. The loops are then cut the desired length and folded together with the seams meeting in the center. The point is made by folding the extra material back to form a triangle against the loop. The ends of the loops are placed side by side when they are stitched to the garment, so that

there is only a slit between them.

Belts and sashes. Belts and sashes may be used on most types of garments. They may be straight and tailored, or crushed and soft, and either single or double. The ends may be tied or fastened together with buckles, buttons, hooks and eyes, or snaps. As a rule, belts are cut on the straight and lengthwise of the material, but they may be cut crosswise and bias for decorative effects. Belts to be fastened with hooks or snaps should be the length of the waistline plus three or four inches for overlap and finish. Extra material will be needed if a tie is to be used.

A double belt is cut the desired length and twice the width of the finished belt plus two seam allowances. The material is folded lengthwise with the right sides together. The raw edges are basted and stitched, with a small opening left along one side or end through which to turn the belt. The excess material at the corners is clipped by cutting diagonally across the corner. By means of a bodkin, a ruler, or other convenient device, the belt is turned right side out; then the corners are pulled out, and the belt is pressed. The edges of the opening are slip-stitched together and carefully pressed. The belt may be attached to the

garment at each side seam with French tacks. The proper position for the belt must be marked with pins on both the garment and the belt. In making a French tack, a stitch is first made into the garment, then into the belt, with about one-half inch slack allowed to separate the two. Four similar stitches are taken, and buttonhole stitches are placed closely over the long stitches, holding them together. The thread is securely fastened in the material before it is cut off.

Hems. The hem of the school dress may be put in by the same method that was used in making the pinafore. The picture shows a hem being marked with the use of a hem marker.

13. How shall the school dress be judged?

To realize what has been well done and where one needs to improve is a big step toward success. Let us study our garment and score it according to the following sheet, knowing why each point is rated as it is. It is always a wise plan to practice on the weakest points before making the next garment.

SUGGESTIONS TO THE CLASS

1. Bring in a number of illustrations showing various types of neck finishes, including bindings, facings, and collars. Also bring illustrations of sleeve finishes.
2. Bring to class examples of trimmings, pockets, and belts that are desirable for a school dress.
3. Practice cutting from paper neck facings that might be used as part of the design of the dress cut over a simple dress pattern.
4. Practice making a bound buttonhole; a cloth loop.
5. Visit the cotton dress department in a ready-to-wear shop. Note the type and variety of finishes used for the neck and sleeves for dresses of various prices.

SUMMARY

Have you been surprised at the number of problems raised in planning and making a school dress?

First, we found that a knowledge of the art principles and of the accepted standards of suitability were essential to a wise choice of design for a dress to be made from the chosen fabric. Next we found that the choice of a serviceable fabric for the dress necessitated knowledge of

SCORE SHEET FOR SCHOOL DRESS

ITEM	RATING (EXCELLENT, GOOD, FAIR, OR POOR)	REASONS FOR RATING
Design of garment Suited to individual.....		
Seams and finishes Well made..... Neat..... Durable.....		
Sleeves Fit well..... Proper length..... Cuff or hem.....		
Button holes Well made..... Properly chosen.....		
Neck facing, collars Well chosen..... Well made.....		
Fasteners Placed correctly..... Correct type..... Sewed on correctly and neatly.....		
Hem Neat..... Well done..... Even.....		
Pressing and cleanliness Free from wrinkles..... Not soiled.....		

the nature of the material and the essential steps in its manufacture into the finished fabric. A scrutiny of the long list of fabrics convinced us that familiarity with all fabrics was a feat not readily achieved.

Next, we considered the choice of a commercial pattern suited to adaptation to the dress design already selected. Points to be considered in ordering a pattern of the correct size were discussed, and then we passed to a consideration of the means by which we might adjust the commercial pattern to individual measurements. These include the accurate taking of body measurements, the marking of the basic structural lines on the pattern, and the application of the body measurements taken over the structural lines to those lines on the pattern. Ways and means for making patterns larger or smaller were considered. The need for accuracy in every detail was stressed.

Plans for cutting and making the dress were formulated. Next we considered the various indications of a need for fitting the dress to the figure on the various structural lines of the pattern. There seem to be many ways in which the charm of a dress may be spoiled by defects in its fit. Familiarity with the defects and with the means of correction was stressed as a tool to make effective work easier. The fitted dress must be seamed and finished neatly and suitably for a wash garment, the sleeve must be properly placed, and the details of plackets, fasteners, and the like must be handled in a workman-like manner. After the completed garment is pressed, it can be scored on an approved basis of evaluation to determine how successful we have been in our creative efforts.

12

Planning and Making Play Clothes

In the days of your grandmother, girls did not think of play clothes as we think of them today. Nor did they have clothes suitable for the activities of the average girl of today. Fashion suggests various types of clothes for various activities, and girls find them both attractive and comfortable to wear.

1. How shall we choose our play clothes?

In thinking of play clothes one can picture many types. The type chosen will depend largely on the activity for which it is to be used. One girl will desire something to be worn in warm weather when playing tennis, or she may think of the lightweight shirt and slacks for picnics. Then there is the girl who is interested in having a ski suit or a woolen shirt and matching slacks to use in cold weather for hiking. Even with so small a list, we can easily see that play clothes include a wide variety of garments.

The season of the year helps in the choice of play clothes both in material and in style of garment. Fashion, too, must be considered, for even in play clothes, the styles change. The important things to be considered in choosing play clothes are comfort, suitability of the fabric, and the style of the garment.

Clothes for ordinary walking can be quite different from those that



Shire-Tex Slacks by Davenshire

The plaid shirt and plain pedal pushers are excellent play clothes for the school girl.

are to be worn for hikes over the hills and down through the valleys. Perhaps in the first instance one would want a simple shirt and skirt, while in the latter case, slacks might be a better choice.

On the tennis court great freedom of body movement is essential, and we find that shorts with pleats seem to be a favored choice. For horse-back riding, leather boots and jodhpurs made from a sturdy material are the ideal apparel, but slacks may be used and are a good substitute. Whatever your choice may be, play clothes present some new and interesting problems in construction. Recognizing that all play clothes should be made from strong, sturdy material, your choice for both pattern and fabric will be made according to your need and the amount of money you have to spend.

By this time you have become familiar with many of the necessary construction problems involved in making play clothes. However it is well for you to think of the problems you will have in some of the various garments chosen. The shirt will present the problems of a flat fell seam and the convertible collar. Should you make long sleeves, you will no doubt want to make the two-piece tailored placket.

Shorts and slacks involve the crotch seam which must be carefully measured to insure correct fit. The front and back vary in length, the back being the longer. The set-in pocket and the waist band are new problems and need careful study. In measuring for slacks or shorts, measure down from the waist line in the front to the middle of the leg at the crotch and add three inches. This will allow one inch for a seam and two inches for needed movement. Do the same for the back. These measurements are taken loose.

SUGGESTIONS TO THE CLASS

1. List your activities and decide what play clothes you need.
2. Examine samples of material and decide what material would be the best for shorts, for slacks, or for a sport shirt.
3. Visit a ready-to-wear store and find out how much the play clothes you need would cost to purchase ready-made.
4. Figure the cost for the garment you will make. Will you save money?

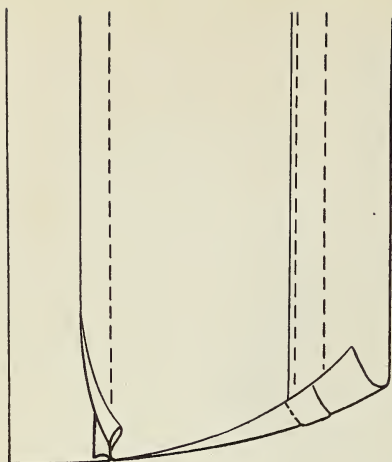
2. How shall the seams of play clothes be made?

Whatever our choice of play clothes may have been, there will be the necessity for having seams that are strong and well finished.



Celanese Corporation of America

Matching shorts and shirt are attractive as well as comfortable for many activities.



The flat fell seam.

Seams that are well finished and have two stitchings are strongest and most durable seams, and therefore their use is favored for play clothes. In the following paragraphs we will discuss the two most commonly used, and then you will be able to choose the one most suitable for the garment you will make.

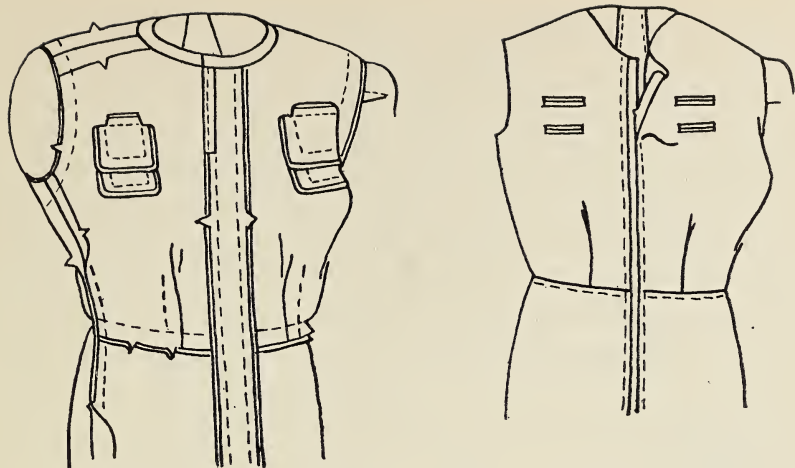
Flat fell seam. A flat fell seam is a strong, flat seam showing one or two stitchings on the right side of the garment. Stitchings are usually made on the right side of strictly tailored garments and on either side of less

tailored garments. This seam is especially good for garments of the type of tailored blouses, some sport clothes, small boys' suits, tailored undergarments, tailored wash dresses, and tailored smocks.

In the construction of the flat fell seam, place the wrong sides together if the seam is to be on the right side, or vice versa if the seam is to be on the wrong side, baste on the line for seam allowance, and stitch. Stitch close to the basting, being careful to have the right side of the stitching on the side that will be the upper side of the finished seam. Cut off the upper edge to slightly less than one-half inch from the stitching, and the under edge to within three-sixteenths inch from the stitching. Press both edges flat in the direction the seam is to be turned. Fold the upper edge over the lower after having turned under a little more than one-eighth inch of the longer side. Baste to the main part of the garment, taking care to avoid enclosing any fullness in the seam. Stitch close to the straight folded edge. To meet accepted standards, stitched fell seams should be flat, smooth, and about one-fourth inch wide. The second stitching should be close to the folded edge.

Lapped seam. The effect produced by a lap seam is that of a seam with an outside stitching. It is commonly used in joining a skirt to the waist, and in other places where a flat finished seam is desired, especially on a complicated line such as a curve or corner. This seam is favored for use in pajamas, slacks, and tailored slips. It is quite commonly found on ready-made garments.

The construction of this seam includes the following steps: Decide which part is to be on the top; for instance, a yoke is usually lapped

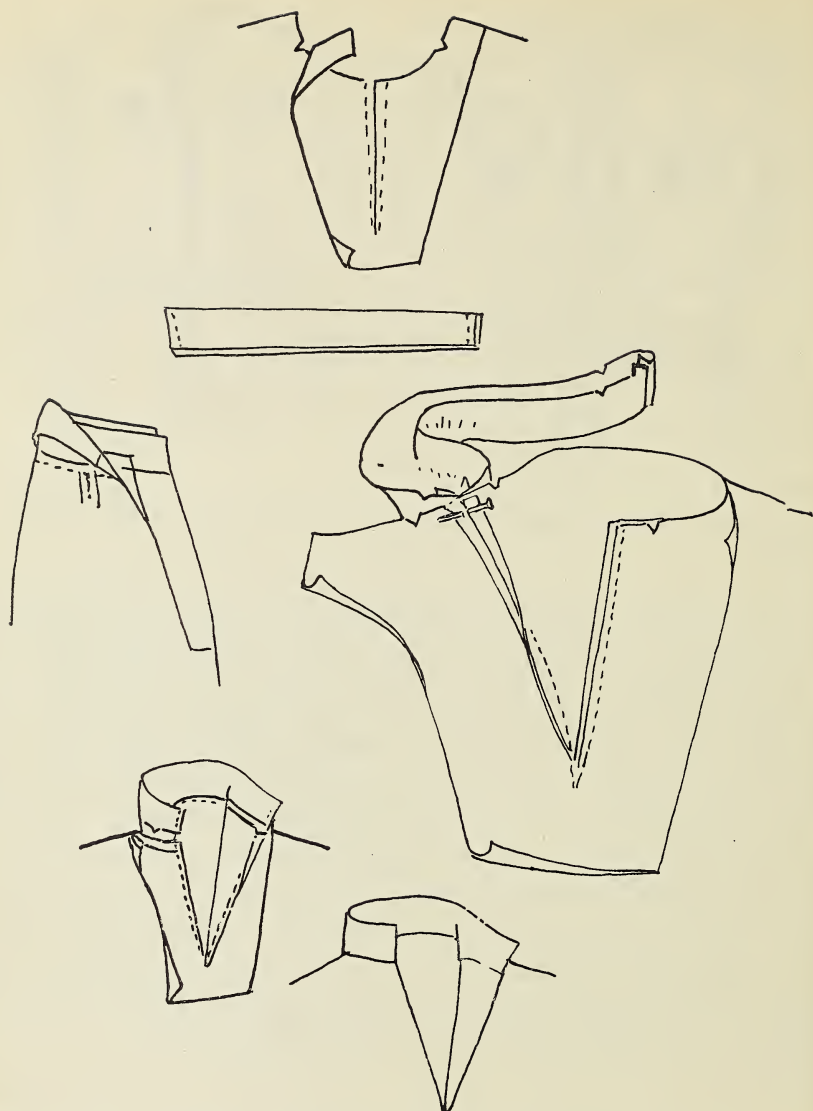


A lapped seam used at the waistline. *Left:* Wrong side. *Right:* Right side.

over the skirt, and the skirt is lapped onto the waist at the waistline. Fold along the seam allowance line and baste or pin, being careful not to stretch the edge. If the edge is along a concave or inside curve, clip the edges toward the seam allowance before basting or pinning. Lay the folded edge exactly on the seam allowance of the other piece and baste the two together. After fitting the garment, stitch close to the edge of the fold. Sometimes two or more stitchings are desired. The seam edge may be left unfinished if the edges do not ravel, or it may be overcast, bound, picoted, or folded under and stitched. Accepted standards for the lapped seam require that it be flat, with no bulge from stretching or lapping, that the stitching be straight, of perfect tension, an even distance from the folded edge, and that any finish used for the seam edges be neither bulky nor conspicuous from the right side.

SUGGESTIONS TO THE CLASS

1. Examine a ready-made pair of slacks and note the kind of seams made.
2. Practice making a flat fell seam and a lapped seam. What precautions must you take in making a flat fell seam?
3. Examine your pattern and decide the kinds of seams to use in construction of the garment.



Finishing the slashed opening and the neckline of the blouse with a convertible collar.

3. *How shall the convertible collar be made?*

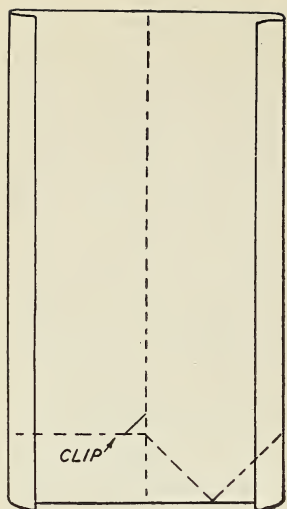
The convertible collar is used with a slash opening which is finished with a facing left free at the outer edge. It is also used in a complete opening as in the shirt. In this case each side of the center opening of

the shirt is faced back. The collar is made and pressed. With center back and seams exactly meeting, and the right side of the lining to the right side of the garment, the underside of the collar is basted in place on the neckline. The end seam of both collar and facing are creased open and the collar is turned wrong side out. The right side of the collar is placed to the right side of the facing and these two pieces are basted. The work is checked to see that the edges of the garment and the collar are even, that the seams on the facing and the end of the collar are basted open, and that the seams exactly coincide. The collar is then stitched, beginning at the edge of the facing on one side and continuing around the facing to the other side. The distance between the two is pressed open and the collar is turned right side out. The raw edge across the back may be finished with a facing, or it may be turned under and slip stitched into position. In this type of construction the neck of the garment should not be stretched and the collar should fit smoothly. The ends of the collar should exactly meet the garment edge.

4. *How shall the plackets for play clothes be made?*

Many of the garments classed as play clothes require making plackets of various sorts. If you have never given the matter particular thought, you might like to examine four or five well-made play garments to determine the various kinds of plackets that have been used. Places for observation will include sleeves, neck openings, and side openings of slacks, shorts, or skirts. Types of plackets that are frequently found in the construction of play clothes follow.

Tailored placket made from seam. Such a placket is frequently found in sleeves. A fold about one-fourth inch wide, or less, is made along each edge of the opening. The second fold in the upper side is on the seamline, and on the lower edge the hem is folded so that the stitching will not show from the right side when the placket is closed. Slip stitching may be used to fasten the hem securely in place, or it may be held in place with the fasteners. It may be necessary to clip the material at the bottom of the placket almost to the seamline on the underside in order to permit a smooth finish. The raw edges at the bottom of the placket should be securely fastened into position with the blanket stitch or with double overcasting.



Two-piece tailored placket.

Faced placket. This placket is used at the neck, and possibly in the sleeve of a garment. A one-piece facing is cut from the straight of the material, with the yarns running in the same direction as those of the edge to be finished. It usually is long enough to be stitched into the neck or wrist finish and therefore is cut as a fitted facing for the edge, one or more inches longer than the finished slash. The width for a neck finish varies, depending upon the type of garment. The center of the facing and the location of the slash on the garment are marked with a basting. With right sides together, and with bastings coinciding, the facing is basted in position. The seam is stitched about one-eighth to one-fourth inch from the basting at the top, and is slanted to a point at the end of the basted line indicating the slash, then up the other side in the same manner. The slash is cut almost to the stitching at the point. The facing is turned to the wrong side, basted, and pressed so that none of it shows on the right side. The outer edge of the facing may be turned under and stitched to the garment, or finished free with overcasting, a self-stitched finish, or pinking.

Two-piece tailored placket. This placket is used on men's shirts and on sleeves and necks of women's tailored blouses.

A slash of the desired length, usually four inches or more, is cut along the yarn of the material. The underside is finished with a one-half-inch binding. A strip of material at least one inch longer than the slash and twice the desired width of the finished placket plus two seam allowances is cut for the upper side. The raw edges of the strip are turned to the wrong side and pressed, and the strip is creased down the center. The upper side of the strip is cut in a V-shape where it is to be attached to the end of the slit, and the lower side is cut straight across at the base of the V. The raw edges of the point are turned under and pressed. The edge of the slash is slipped between the edges of the strip

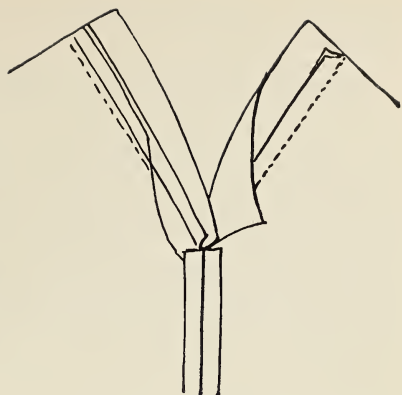
and is basted in position with the folded end of the strip close against the end of the slash. The binding is slipped under the upper side of the placket and the end is basted into position. The upper side is then stitched entirely around along the edge and twice across at the base of the V to insure a firm, flat finish and strong end.

Faced and extension placket. In order to create a placket that will be inconspicuous, flat, and smooth in fabrics, a placket that includes a facing and an extension but is not continuous is used. The extension

may be a part of a dart or seam of the dress, or it may be applied. If the extension is not a part of the dress, the placket is made by finishing the opening with two strips of cloth, one used as a facing on the upper side, and the other used as an extension on the lower. The two strips of cloth—preferably each having a selvage—and the placket opening are prepared as for a plain placket. The strips are basted along the seam-line so that they extend three-fourths inch below the end of the placket and are stitched with the right side to the right side of the garment. If the extension is a part of the dart or seam, a strip must be applied to it as a facing, and the procedure is as outlined.

The bastings are removed, and the seam is pressed toward the strip. In cases involving heavy material, the seam is first pressed open and the edge toward the strip is trimmed, and then the seam is pressed toward the strip. As turning in the raw edge of the strips often causes unnecessary bulkiness, the finish used is either pinking or binding with straight or bias seam binding. If strips with a selvage are used, no finish is necessary. If the material is so light that the turning in of the raw edge does not cause bulk, these edges may be turned and stitched one-sixteenth of an inch from the edge. In order to secure the two strips together at the end of the placket, forming a hinge, they are stitched firmly on the machine or by hand, and are either pinked or bound, depending upon the finish used for the placket.

Other construction details frequently used in the making of play clothes with which you may not be familiar include putting on a waist



The faced and extension placket. The upper side becomes a facing for the opening, the lower an extension.

band and making bound pockets. Would you like to know the steps in each of these?

Waistbands. Bands are straight pieces of fabric used where fullness is to be held in gathers, pleats, or darts. Unless it is necessary to match the design of the fabric in the garment, a band is usually cut on the lengthwise yarn of the material because the fabric is usually stronger and stretches less in this direction. The length of the band should be the waist measure plus the allowance for shrinkage, overlap, and reinforcement. The width of the strip should be twice the width of the finished band plus two seam allowances. The center of the band should be determined after the allowances on either end have been indicated, and the band should be marked in quarters and eighths to insure equal distribution of the gathers or pleats. The waistline of the garment should be similarly divided.

The right side of the band is placed to the wrong side of the garment, and the center of the band is pinned to the center of the garment at back or front, depending upon where the garment will open. When the opening is at the side, the amount needed for front or back is pinned at the opposite side from the opening and the front and back parts are then basted in place. Marked points on the two pieces are brought together and pinned. Gathers or extra fullness is eased in, and the fabrics are basted with small stitches. The seam is stitched on the machine. The bastings are then removed, and the seam is pressed with the raw edges toward the band. The ends of the band are turned at the finished edge of the garment. If reinforcement is desired, the extra material is left inside the band. If no reinforcement is needed to hold the fasteners, any extra material should be trimmed off. The seam allowance at the other edge of the band is turned and pressed. The band is then folded through the center and pressed. The ends may be "locked" by slipping the folded seam allowance of the edge under that at the end. The band is basted in position so that the first stitching is entirely hidden. Care should be taken to keep the crosswise yarns in the band parallel when the band is folded. The band is stitched by machine. Stitching may be used along one edge or around the entire edge of the band. In the first case, the ends are finished with overhand or slip stitches.

When a soft finish is desirable, no machine stitching should show on the right side. The right side of the band is placed to the right side of the garment and is finished as previously described, except that the final stitching is by hand hemming or slip stitching.

A band should be smooth and flat, and free from diagonal wrinkles.

The edges should meet exactly at the end and should be securely fastened together. Corners should be square. The band should be uniform in width. Fullness should be evenly distributed and not bunched.

SUGGESTIONS TO THE CLASS

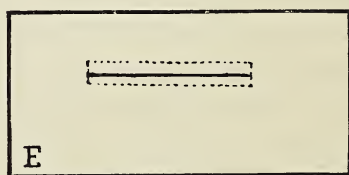
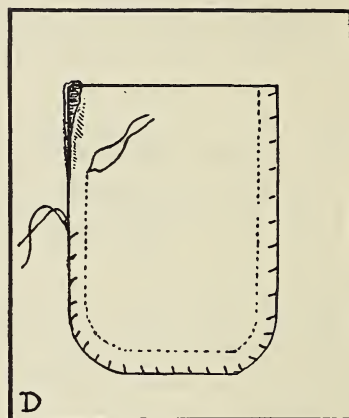
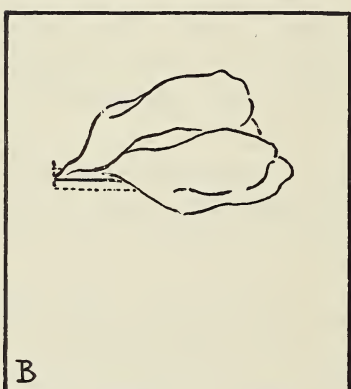
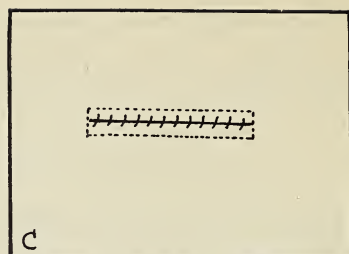
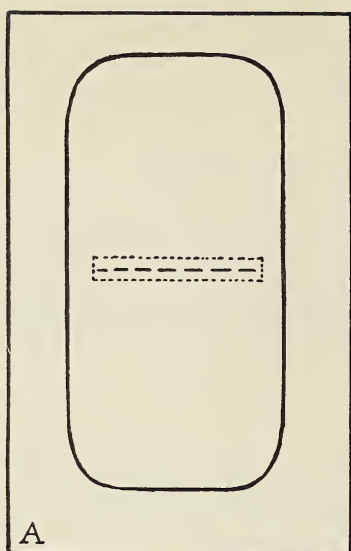
1. Examine the plackets in some of your garments. What plackets were used? Were they well chosen? Why?
2. Practice making a placket that you would use on men's shirt sleeves.
3. Examine the waistbands on your skirts. Was the method used satisfactory? Suggest another way of doing it.

5. How shall the bound pocket and other details in the finish of the garment be made?

Bound pocket. The set-in bound pocket is made like the bound buttonhole except that a large piece is attached to form the pocket. It is used where it is desirable to have a pocket less noticeable than the patch pocket.

A bound pocket should be well proportioned, and the bindings should be of uniform width. The pocket should be securely fastened to prevent sagging, and it should be smooth and flat so that only the binding shows from the right side.

The position of the pocket is marked on the garment with a line of basting. A straight piece of material, two inches wider than the pocket width and twice the length of the pocket depth plus two or two and one-half inches, is cut from the fabric. With right sides together, the pocket piece is basted in position on the garment, one end of the pocket being placed from one to one and one-fourth inches above the line of basting which marks the position of the pocket on the garment. A rectangle is stitched the length of the pocket opening and one-fourth to one-half inch wide. The fabric is cut along the basting thread which marks the center of the opening and diagonally toward each corner to within one or two yarns. The pocket is then pulled through the slit and basted and stitched in position as for a bound buttonhole. The lower edge of the pocket is folded back to cover the upper edge of the opening and is stitched along the sides. It is then stitched to the edge of the binding and drawn through to the wrong side across the top directly



Steps in making the bound pocket. *A*: Continuous piece for the pocket stitched to the right side. *B*: Piece stitched in place, the slash cut, and the piece pulled through to the wrong side. *C*: Bound edges of pocket drawn together with basting thread. *D*: Wrong side of pocket. *E*: Right side of finished pocket.

over the first stitching on the garment. This last stitching is to keep the top of the pocket from dragging down. The ends of the opening should be securely fastened by hand from the wrong side, and the raw edges of the pocket should be finished as the rest of the garment.

If a bias binding is desired for decorative purposes, the opening is finished as for a bound buttonhole, and then the pocket is made from a straight piece and is stitched in place as described. If fashion permits,

the ends of the pocket may be strengthened with a bar or arrowhead. Raw edges are overcast or finished as in the rest of the garment.

Special types of pockets such as we find in slacks at the side seams are similar to the pocket described above. Various patterns will have somewhat varying methods used in putting the pocket in, and it is wise to follow the directions used on the guide sheet of your pattern.

Fastenings. The fastenings for a skirt are usually buttons and buttonholes. Although the buttonhole maker is often used, one should be able to make buttonholes by hand.

Slacks and shorts may require different types of plackets which include snap fasteners and slide fasteners. Whether buttons and buttonholes or snaps are chosen, the fasteners should be strong, durable, well done, and should permit easy dry cleaning or laundering.

Pressing. It is necessary for a good appearance to have a well-pressed garment. The shirt does not present any new problems, except to be sure the seams are well pressed. Since it is finished on the right side, it is decidedly noticeable.

Slacks, shorts, or ski pants give us new problems. Usually the legs are too small to slip on the ironing board, so they must be pressed double. A good method to use is to slip the garment onto the ironing board from the waist and to press each leg as far as possible, using the general directions for pressing. When one side of the garment is finished, do the other side. Remove the garment from the board and fold one leg flat, so that the underleg seam and the outside-leg seam lie together the length of the underleg seam. Press the garment flat on each side. Do the other leg in the same way. The crease at front and back should extend about two inches above the crotch seam. Shorts should then be hung to a hanger with clothes pins or a similar device. Slacks, because of length, are usually hung over the well-padded straight part of a clothes hanger or on special trouser hangers.

SUGGESTIONS TO THE CLASS

1. Choose the placket you will want in your garment and make one in a trial piece of material. What precautions will you need to take when making the placket in your garment?
2. Go to a ready-to-wear department of a local store and examine some play clothes. Do the finishes you are making compare favorably with the ones you have seen? How can you improve upon the next ones you will make?
3. Examine the waistbands of your skirts and decide how you want the one you will make to be.

6. How shall play clothes be judged?

The judging or scoring of play clothes presents a problem much different from any we have had before, as the garments will vary widely in design and in problems involved. However, regardless of this, there are construction problems to be considered in each garment as well as design, material used, and suitability of garment.

In the score card an attempt has been made to have you analyze your garment and realize where you need more practice and to create a desire for better work. In scoring a garment that has been well made, there should be no checks in the Poor column, only a few in the Fair column, and several checks in Good and Excellent.

SCORE SHEET FOR PLAY CLOTHES

ITEM	RATING			
	Poor	Fair	Good	Excellent
General appearance				
Outward appearance				
Color				
Fit				
Neck line				
Seams				
Finishes				
Stitching				
Choice				
Width				
Hems: sleeves and bottom of garment				
Even (distance from floor)				
Width (standard—looks well)				
Fastened down correctly				
Fullness cared for properly				
Neck finish				
Well finished				
Well chosen				
Plackets				
Properly chosen				
Well made				
Flat appearance				

SUMMARY

The American girl has many uses for play clothes. The different seasons of the year and the various activities of each season present a need for clothes suitable to the occasion. There are certain new construction details to be mastered in the making of play clothes. Problems involv-

ing suitable plackets, pockets, seams, and collars for the garment need special attention. The fabrics to be used will need special thought in selection because play clothes require sturdy fabrics, fabrics that can stand strain and wear.

When the new techniques are mastered, the next step will be to outline the procedure of making the garment. This procedure will not be the same as the one used in the preceding unit because you now have had some experience, and the garment chosen will be different in design from what has heretofore been made.

13

Remaking Garments

The apportioning of a limited amount of money to cover many needs is the problem of many homes. Successful planning results in using what we have on hand. Many a wardrobe can be substantially increased by a thorough renovation of certain garments on hand. A small investment for new materials is the only expense involved in remaking the used garment. For some garments, new accessories may be all that is needed to make the necessary change. Because a dress has had several seasons' wear, or because styles have changed, the garment is not necessarily valueless. It may be remodeled for a younger member of the family, or it may be remodeled and used to bridge the gap between seasons. The wise buyer will rarely, if ever, buy the first style of the season. She may even use a remade garment until fashion is stabilized. In general, the American people are quick to accept a new fashion. The short skirt is rapidly on its way out, so there is interest in ways of lengthening the garments on hand.

Because remodeled garments are generally used for everyday wear, the design chosen should be for such a purpose. Many times a new collar and cuff set, a new belt, or perhaps the addition of pockets as decoration, may change the garment enough that one is pleased with its somewhat new appearance. However, remodeling usually means that the structural lines of the dress are to be changed. This may mean a complete recutting, or it can be the addition of other material. Two used garments may be satisfactorily combined into one garment from which much wear can be obtained. One must not feel that remodeled garments can take the place of new ones, but they can serve to enlarge and give variety to the wardrobe.

After having listed the needs for the coming season, it is well for one to determine how much money can be spent for clothing. Time and again it will be found that one's needs far exceed one's ability to spend. This will no doubt lead to a careful checking of one's present wardrobe to ascertain what is available for remaking and what articles must be purchased new. A garment should not be stored indefinitely, as all fabrics tend to deteriorate with age. Remodeling well done is economy when the broadest meaning of the term is understood—that is, remodeling is a wise use of available resources.

1. How can the wisdom of making over garments be determined?

To make over a garment is not always a wise thing to do. There are many questions to answer positively before spending time and perhaps money for the garment to be remade. Some of the questions may be: Do you enjoy wearing made-overs? Is the garment worth remaking? When remade, will the style be right? Will the remade garment compare favorably with new garments? The one who is to wear the dress must find pleasure in it if time has been well spent in the reconstruction process.

It is generally understood that remodeled garments do not take the place of new ones, but few people realize that more skill and ingenuity are required to remake than to construct garments from new material. If remodeling is well done, the results will compensate for the work involved.

Deciding what changes to make. The extent of changes made in the garment will depend upon its style value, its becomingness, and upon the durability of the material. If styles have changed but slightly, as is sometimes true, only minor changes will need to be made in remodeling a becoming garment. Perhaps changing the hemline will make the dress wearable, or a slight refitting may be required. Such changes should be a part of the seasonal care of one's wardrobe, as should the replacement of collars or vestees, and a thorough seasonal cleaning.

If the garment has been definitely unbecoming, plans for remodeling will be much more extensive and will involve far more care than is necessary for the garment needing but slight change. Unbecomingness may have been due to poorly chosen colors, to wrong lines, or to over-



Junior First Dresses

Two used garments may be combined into an attractive up-to-date dress. Remnants may also be used.

ing. They are often used to hide piecings or poor construction lines. For this reason the garment must be carefully examined before their removal is undertaken or before the garment is redesigned.

Adding new materials. Remodeling sometimes requires the use of new material with the used garment, or the combination of parts of two garments. Care must be taken that when new and used materials are combined the used material is not made to appear shabby. Particular attention must be given to the combination of colors and textures so as to produce a satisfactory effect. Cotton or linen materials for collars and vestees often give more satisfactory results than those of high luster, such as satins or novelty materials of silk or rayon, when combined with used materials. Dead white or bright colors used for trimming may make the worn material appear dingy. Off-whites and softened colors combine better with materials that have seen previous use. Plaids are often combined with plain materials, especially in making over dark wools. Again, a better effect will result if contrasts which are too decided are avoided.

decoration. If the color is wrong, the fault may be remedied by introducing a becoming color close to the face through the use of a collar, a vestee, or a bolero jacket. Sometimes the entire dress should be redyed. Unbecomingness of line usually necessitates recutting the garment. Such extensive changes as redyeing or recutting to change the silhouette are justifiable only when the material is in good condition. Unbecomingness due to overdecoration can be easily remedied if one has discriminating taste. It is possible to eliminate apparently useless ornaments—large belt buckles, bows, or poorly constructed lingerie trimmings—that destroy the unity of the design. Some trimmings, however, are so much a part of the garment that they cannot be removed without a complete remaking.



Junior First Dresses

A good design for a made-over, where added length is necessary.

When one is planning to remake a garment it is well to examine the material carefully, and if it is satisfactory, study recent pattern books for suggestions as to a good way to proceed.

SUGGESTIONS TO THE CLASS

1. Analyze your wardrobe and determine what clothes you have on hand that could be remade.
2. Figure the cost of remaking the garment. Is it worth the time and money to be spent?
3. Draw a plan for remaking one of your dresses into a garment for a child.

2. How shall materials be prepared for remaking?

To remake the garment successfully, it is necessary to have the material in the best condition possible. This means that garments to be remade will need laundering or dry cleaning if they are to give satisfactory results. All ripping and brushing of seams should be done before the cleaning process takes place. This method of procedure insures better cleaned and pressed material with which to work.

One must take special care that traces of hemlines are removed as well as possible, and that the material has been thoroughly brushed on each side before the laundering or cleaning process takes place.

Testing for fading. Whenever material is to be laundered, it is advisable to try a small piece to see if it fades. If fading does not take place, the laundering process will be the same as previously given for the various fabrics. The material should be carefully pressed before construction work is started.

Dyeing. When a garment has seemed to sun-fade or has discolored through the previous wearing period, it may be dyed. Dyeing is a means of making material of usable quality fresh and bright in appearance. Commercial dye of good quality may be purchased on the market and, if directions given on the package are followed carefully, good results may be obtained. Dyeing a sample first is the surest way to test for the desired results. Some materials are so constructed that either side may be used as the right side, and when this is possible, the finished garment may present a new appearance if cleaning and pressing have been carefully done. Wool materials are sometimes sponged with

ammonia water to freshen them and to remove the shiny surface. In any process of cleaning or dyeing preparatory to remaking a garment, the ripping should have been done carefully, in such a way as not to stretch or tear the seamlines, and all spots should have been removed.

The old adage, "A penny saved is a penny earned," is very true in the matter of remaking clothing. Preparation of the material is a step not to be carelessly done if the best results are to be had.

SUGGESTIONS TO THE CLASS

1. Practice ripping a seam, and note how threads may be pulled from one side and the other.

2. Prepare the material which you plan to use for your made-over garment, following directions given in the text. Is it possible to use the wrong side of the fabric? Does fading necessitate that the material be turned or perhaps dyed?

3. Bring to class a garment that has become "shiny" through wear. Demonstrate to the class the procedure for restoring the original appearance of the material.

3. *How shall garments be redesigned?*

The success of remodeling garments is dependent upon a knowledge of garment lines and body proportions, upon the appropriate adaptation of style accents to the wearer, and upon one's ability to handle clothing materials. The previous study of dress design should aid in recognizing designs that will be becoming, and one's experience in garment construction should be of value in choosing lines that lend themselves to the particular remodeling at hand. Whether the remodeling of a dress that had never been quite right or the complete redesigning of one given by an older sister is undertaken, there are many problems to be solved. One should strive to have the made-over dress as becoming and as well made as a new one.

Remodeling for the smaller person. It is often easier to remodel a garment for someone a little smaller than the original wearer, since ample material will then be available with which to work, if a conservative design is chosen. The entire recutting of the garment is possible, offering greater freedom in the choice of design and providing opportunity to avoid worn places. However, even though the person who will wear the dress is much smaller than the original wearer, it is difficult to change the silhouette without much piecing. Extra fullness



Suggestions for combining new with old material in remaking a dress. Parts of two used garments are sometimes successfully combined.

in the skirt, additional length, full sleeves, large collars, and revers all offer problems that must be carefully worked out. It is possible that the original garment may have been cut in many pieces. This necessitates the choice of a pattern that permits the use of small pieces. It is sometimes possible to cut the used materials in such a way that the original garment lines become a part of the design of the finished garment. A jacket made from a man's coat, for example, may be so cut that the



Children's dresses can often be made from garments discarded by adult members of the family.



Designs permitting the addition of extra width.

jacket made from a man's coat, for example, may be so cut that the pockets come in the proper position in the made-over garment. Sports blouses cut from men's shirts often use the original closing of the shirt, including buttonholes and buttons.

The pattern to be used for cutting the garment should be selected with the lines of the original garment in mind. It is very difficult to find one that meets all the requirements, and usually one must be adapted to the particular need.

Extra width. Extra width is often needed. This may be gained by introducing panels in either the waist or the skirt by piecing under lengthwise trimming seams, or by using wide tucks and pleats. Slot seams are used to join lengthwise sections, and if carefully placed are highly decorative.

When width is needed across the back of a garment, inverted pleats are sometimes placed on the French-dart line, permitting the introduction of a strip of fabric down the center back. Tucked strips set into the garment are still another means of adding width. Added fullness may be provided in a plain skirt with pleated insets, shirred insets, or godets. There must, of course, be matching material available for these purposes.

Extra length. Extra length is usually introduced by means of yokes in either the waist or skirt. If yokes are carefully proportioned, the majority of persons will find their use possible in a made-over garment. Sometimes a strip of fabric is introduced at the waist. This may be merely a wide belt, or it may be a strip that gives to the garment a semiprincess effect. Double or triple belts, narrow in width, may be used with such a design. Skirts are sometimes lengthened with a band at the hemline or with a narrow pleating. For the most part, better effects are gained if matching material is used. Contrasting material is apt to give to the garment a decidedly "pieced down" effect. An exception is found in children's garments where, for example, a dark blue

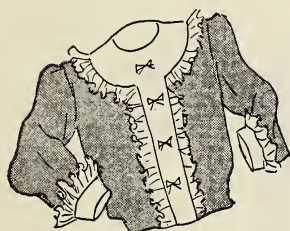
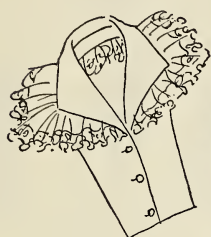


Junior First Dresses

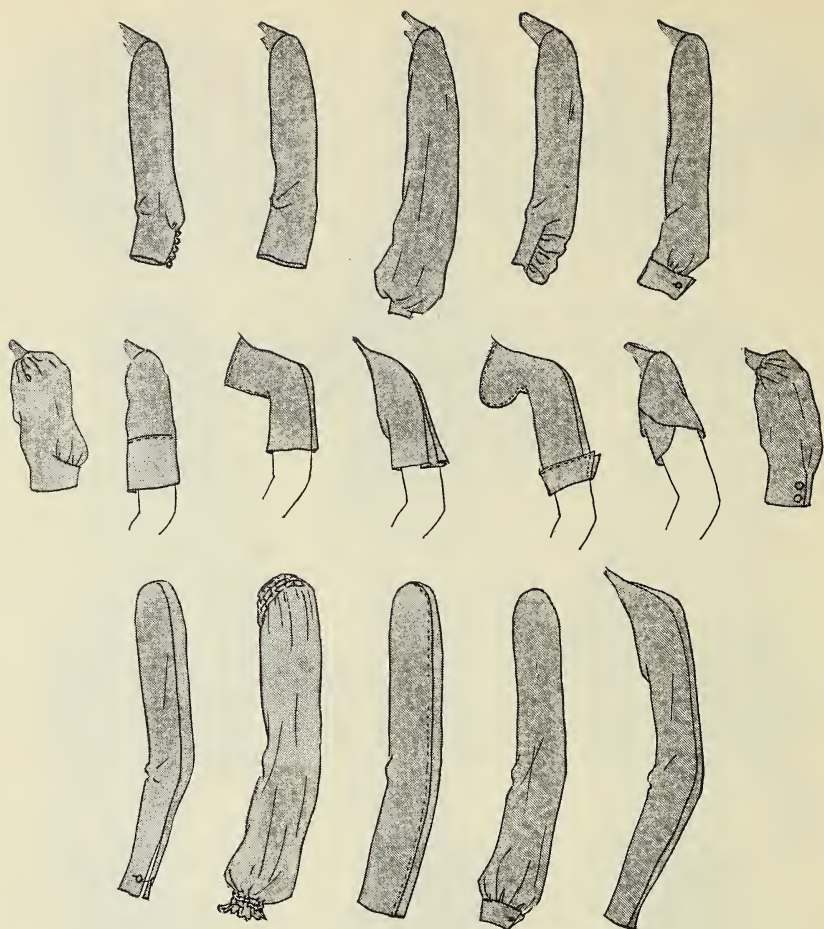
A practical and attractive way to add length to the otherwise useless dress.



Designs that permit the addition of extra length to the garment.



Necklines that are too low to be becoming may be built up by the use of yokes and carefully cut collars.



Suggestions for redesigning sleeves.

wool may be made up with dark blue plaid trimming the blouse, and facing down the hemline. The contrast is slight and therefore effective.

Necklines. Necklines that require building up offer special problems. If a turn-down collar is to be part of the design, pieces of material may be applied at the neckline to build it higher, a lapped seam being used. The collar cut wide enough to cover is then applied as usual. If the garment is collarless, the neckline may be filled in with curved bands or yokes cut the shape of the neck. These may be of matching material or in contrast, but in any case they should be carefully designed so that the lines are becoming to the wearer.

Reinforcing armscye edges. If it is necessary to reinforce weak armscye edges, the sleeves are often removed from the garment and set in a

lining that is faced back around the sleeves with material used for the dress. The armscyes of the garment are then trimmed out as necessary and faced back or bound.

Sleeves. Sleeves may also require special attention in the remodeling of garments, either to add width or length or to redesign them in keeping with the demands of fashion. Piecings can be made either lengthwise or crosswise of the sleeves. They add to the beauty of the design if they harmonize with the lines of the blouse, and if the same type of trimming stitching as is used elsewhere in the garment is used to introduce them. The addition of a wide shaped cuff to a sleeve is one of the commonest means for adding length. A tucked strip may be set lengthwise in a sleeve to add width, provided other tucking appears on the garment.

It should be remembered that a good quality of workmanship adds much to the success of the made-over garment. Straight stitching, careful handling of parts so as to avoid stretching, and careful pressing all contribute to a satisfactory final product.

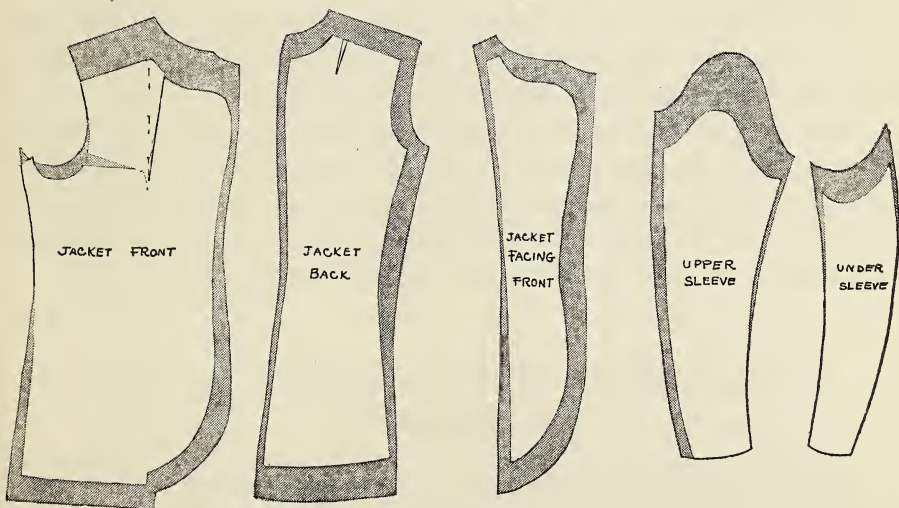
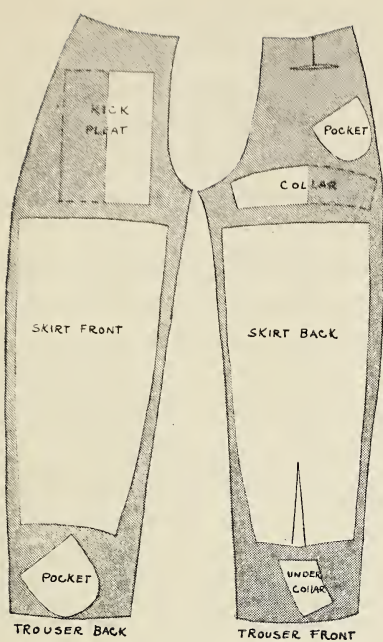
Uses for partly worn garments. Some uses for partly worn garments are suggested here.

<i>Used Garment</i>	<i>Remodeled Garment</i>
Woman's coat	Dress for woman or child; skirt; child's coat.
Woman's coat suit . . .	Girl's or boy's suit; woman's or girl's dress; boy's coat.
Woman's dress	Dress for smaller person; skirt; small boy's suit; girl's coat.
Woman's skirt	Girl's dress; boy's trousers; skirt.
Silk blouse	Combine with wool dress to make girl's dress.
White crepe blouse . . .	Tint and use for collar and cuffs and vestee.
Wool sweater	Sweater, leggings, and cap for child.
Man's overcoat	Woman's or child's coat; boy's overcoat.
Man's coat	Child's coat; small boy's trousers.
Man's suit	Small boy's suit or girl's suit.
Man's trousers	Boy's trousers; little girl's dress, leggings, or cap.

A man's suit, discarded for any of a number of reasons, offers many possibilities for making over into a suit for a high school girl. However, several angles should be considered before undertaking such an extensive made-over problem. First, the man's suit must be of a size somewhat larger than a garment the girl would wear. In recutting any gar-



Children's outer apparel can be made satisfactorily from heavy woolen garments that have done service for some older member of the family.



A plan for cutting a girl's suit from a man's suit, showing how it may be done with one pair of trousers.

ment there must be some extra width and length to allow for necessary reshaping and for the removal of worn edges. Then, the suit should be examined carefully to make sure that the material is sufficiently good to warrant the work involved in making over. Perhaps the fabric should be made wrong side out. And besides these important considerations, the material should be of a weight, design, and color that will make a satisfactory suit for a girl. Some worsteds used for men's suits are too heavy to be suitable for any garment but one that is man-tailored.

Once you have decided to make over the suit, it should be ripped up, cleaned, and pressed. There may be some parts that you will wish to use as they have been on the original garment. As far as possible, the garment should be recut because the new suit will be more effective if old pockets, buttonholes, and original dartlines can be eliminated, and ones in proper scale be made on the newly cut garment.

A pattern with lines as nearly like the old garment as possible should be found over which to cut the garment. Even when a satisfactory one is at hand, some piecing may be necessary. The skirt will have to be relatively straight unless the suit being made over is one that had two pairs of trousers. Two pairs of trousers will allow for a skirt with pleats or flared gores.

Better results are usually obtained if new interfacing material and new lining fabric are used. Those ripped out of the man's suit are often too heavy to be handled satisfactorily in a girl's suit.

With careful planning, following the pattern cutting chart as far as possible, and then using your ingenuity where directions fail to give needed information, a satisfactory suit may be cut. It will be necessary to follow the best procedure for making a tailored garment, remembering that success depends partly upon repeated pressings.

4. How shall the made-over garment be judged?

The old saying, "Anything worth doing is worth doing well," should hold true in remaking used garments as well as in making new garments. No matter what we make, there should be something gained through the making process. It may be in actual knowledge or in manipulative processes or in both. The following score card will help you to score the garment you have made. When you have completed the

task of scoring, study your answers carefully and make suggestions of how you may improve on another garment.

SCORE SHEET FOR REMADE GARMENTS

	<i>Yes</i>	<i>No</i>
1. Was the used garment worth remaking?		
2. Was the material made as nearly like new as possible?		
3. Was the material well used?		
4. Was the garment changed enough in style to make it appear as a new garment?		
5. Is the cost of remaking justified?		
6. Is the wearer happy with the remade garment?		

ITEM	RATING			
	Poor	Fair	Good	Excellent
General Appearance				
Color good for wearer.				
Improved by adding color				
Conforms to lines of body				
Neckline (lies flat) (good style)				
Sleeves (correct size) (good armseye)				
Hem				
Even at bottom				
Put in correctly				
Even stitches				
Well pressed				
Seams				
Well chosen				
Correctly finished				
Stitched straight				
Well pressed				
Fasteners				
Properly placed				
Lie smooth				
Well chosen				
Put on correctly				
Pressing				
Smooth finish				
Creases belong where placed				
No unnecessary shininess				

SUGGESTIONS TO THE CLASS

1. Choose dress designs that lend themselves to the making over of old garments. Can you find unusual designs for yokes in skirts and blouses? What suggestions can you find for making necessary vertical seamlines in made-over garments?

2. With the score card used on your garment, score your partner's garment. How can she improve on her next garment?

3. Choose a design for a child's dress that can be made from one of your garments.

SUMMARY

Remade garments can aid greatly in renewing one's wardrobe at not too great a cost and no doubt have a real place in planning expenditures to be made for clothing. A study of our clothes and of styles in pattern books gives good ideas for renewing old garments.

An evening dress, an afternoon dress, or a beach coat may have been worn but little before it was outmoded or outgrown. Such articles are wholly suitable for projects in remodeling. They may be made to serve their owner again as a between-season dress or as an extender of an otherwise limited wardrobe. There are a few simple rules that may serve as guides as to the wisdom of making over garments. These should be applied as a check to articles in one's wardrobe from which one is not getting full service.

Then there comes the problem of the steps to be taken in reconditioning the fabric and redesigning the garment for its wearer. Various devices are successfully used to introduce needed extra width or length of waist or skirt, familiarity with which greatly facilitates effective planning. In general, if one accepts the made-over garment as an extender and not as something that has lessened the chance for desired new garments, one establishes an attitude by which their wise and enjoyable use becomes possible.

14

The Clothing Needs of Other Family Members

Determining the needs of clothing for all family members is a problem of interest to all. Thus far we have largely considered clothes for the high school girl. It is a narrow point of view to see clothing from only one person's standpoint.

Now let us turn our attention to your home and to other members of your family. What are their clothing needs and wants? What interplay, if any, exists among the wants and desires of all family members? Should there be rules of the game that apply to meeting the needs and wants of various members, or should the one who can demand in the loudest voice get the most? Let us consider the clothing needs of the others in your family, each in turn, and then see what plan can be made for the good of the group and of all of its members.

1. *What are the clothing needs of the mother?*

Appreciating mother. Sometimes the statement is made that our mother constitutes so large a part of the early environment of each of us that we may never become aware of her identity as a person with interests and desires akin to our own. In such cases, mother may mean a person who butters a slice of bread liberally and spreads it so generously with jam that our after-school appetite is appeased; who counts out our



Nancy's of Hollywood

The school girl's mother is well dressed in simple tailored garments. Note the touch of color in the belt and scarf.

monthly allowance in shiny coins; who, on short notice, makes a costume for our participation in the May Day Fete; who contrives so that almost miraculous results are achieved on a limited clothing allowance; and who gives the needed and wanted appreciation and affection. Of course, now that you are approaching your own adulthood, you recognize that the mother you knew as a child was only one aspect of the person who is your mother. Now you discover that she, too, enjoys attractive modish dress, has need for relaxation and recreation, and has hobbies she would like time to follow. Perhaps she is as deeply concerned with a dumpy figure, commonly described as matronly, as you are with a nose that tilts up at the end or hair that straggles. Certainly, appreciation and affection are meaningful to the average adult as well as to the younger family members.

Artists tell us that to appreciate an object we must see it without regard for its usefulness. Can you see your mother apart from her useful activities as a homemaker? As you are able to achieve this viewpoint, it becomes possible for you to approach an understanding of the needs of the mother in the home as an individual. Clothing is one of these needs.

Does the phrase "mother in the home" seem strange to you? It is used to express the distinction between the mothers who make their contribution to their families wholly through their activities as homemakers. Such women are sometimes described as "not gainfully employed." There are many mothers who are forced to enter the wage-earning field either to provide the family income or to supplement that earned by the father or other family members. These mothers are "gainfully employed." The clothing needs of the "gainfully employed" mother are similar to those of other business and professional women, and have much in common with those of the high school girl.

Special clothing needs. The clothing needs of the mother "not gainfully employed" differ from these in certain important regards. The wardrobe of the mother in the home, like that of the "gainfully employed" woman and that of the high school girl, should meet the requirements held as basic for adequate clothing. It should provide for expression by the individual of her love of the beautiful. In addition, in most cases consideration should be given to the activities that will make up the day of the woman who does the household tasks. These services require special dresses. Just as some jobs require a uniform, so the homemaker who is concerned with the various activities involved in the maintenance of a home has her garb for action. Formerly such garb was termed "house dress," but the dreary designs and drab colors that were

used for these garments led to a distaste for the term. Mothers in the home are now including in their wardrobe not house dresses but service dresses, porch dresses, or neighborhood frocks, all designed for active wear. Regardless of their name, the dresses serve the purpose of the house dress of old, and in addition bring satisfaction to the wearer because of the pleasingness of their design. Service dresses should be durable, easily laundered, comfortable in fit, and becoming to the wearer. The wardrobe should include suitable clothing for social occasions that will encourage the extension of interests beyond the four walls of the home. It may or may not include evening dresses, evening slippers, and evening wraps, depending on the type of social occasions that the homemaker and her husband find interesting, and also on the customs of the community in which they live. Provision for swim suits, tennis shorts, or hiking togs depends upon the interest of the woman. If she enjoys such sports, or if she finds that participation in them with other family members fosters sharing in recreation, the inclusion of such garments should be regarded as necessary.

Factors in clothing choice. The choice of becoming clothing for the mature woman should be undertaken only after a careful study of her characteristics has been made. The color of hair, eyes, and complexion establish the range of color that will be found becoming. Stature should be considered in choosing the texture of the fabric, as well as in choosing the design of the fabric and the cut of the garment. Finally, her personality, the sum total of all her traits, will determine the nature of the entire design. A design that is simple and restrained seems well suited to the woman who is poised and reserved. Rich fabrics seem to belong to regal looking women. Soft, pliable textures and subdued colors look well on the gentle, retiring person. In general, stability in color, line, and design characterizes the wardrobe of the mature woman.

Maturity usually brings changes in color notes of skin, lips, and hair. The skin in general tends to become more sallow, the lips and the flush in the cheeks become more of a purplish red, and the changes in the hair range from the darkening of a gold or chestnut brown, accompanied by a loss of glint and luster, to a graying or whitening. These changes in personal coloring make unbecoming the favorite colors and textures of girlhood days. Delicate blues, greens, or pinks, or dashing mustard yellows, and the sheen of white or flesh satin, highly becoming in youth may, with maturity, deal harshly with the wearer. A rosebud tucked over the ear or a hair band of brilliants, like other pleasant

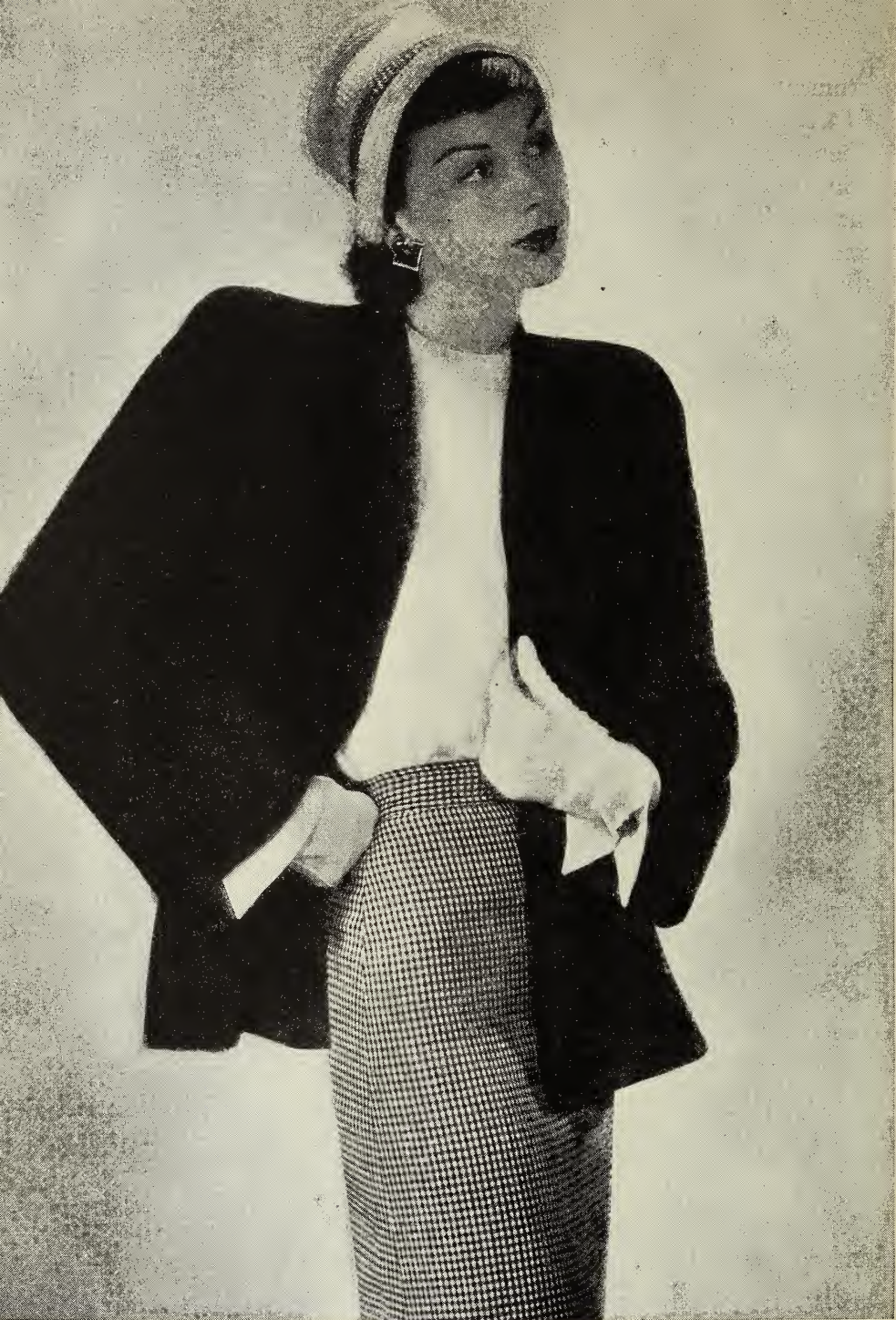
adornments of youth, may seem less coquettish than sad on a middle-aged wearer.

Changes in line direction of the form are commonly observed as attending maturity. Despite rigorous diet and strenuous schedules of home activity, few women find that they can wear their wedding dresses at daughter's announcement party if they so wish. A thickening at the waist and hips and a tendency to bulge at the wrong places are often found to be the prohibiting causes. These are indications of changes in line direction that must be considered if the adult is to be successful in making the choice of clothes an artistic expression of her individuality.

Young children. If there are young children in the home, the mother must be careful to select the fabrics and the designs that minimize the rumpling and tousling which the care of the children usually causes. The decorative detail should be such that it is easily kept in a satisfactory condition. Organdy jabots, pleated and ruffled, fragile chiffon ruffles, and similar details are difficult to maintain in a presentable state if subject to contact with the sticky fingers and grubby hands that seem a normal part of many, if not all, young children.

The older sons and daughters. As the family grows older, the problems of the mother in planning dresses change. Sons and daughters in high school often feel free to offer suggestions and criticisms to the mother in the home as to ways and means of improving her appearance by additions to or the revision of her wardrobe. If one wishes to attempt such an enterprise, the procedure to be followed should be identical with the one used in formulating one's own wardrobe plan. First, a clothing inventory should be made. Next the activities of the individual that determine her clothes needs, such as home duties, church attendance, interest in sports, and social life, should be itemized, and their relative importance determined. Then one should find out how much the mother allows herself for her average annual clothing budget. You may be surprised if you compare your own annual clothing expenditures with those of your mother. Not infrequently high school girls find they are taking far more than their own share, and that the added amount has been taken from their mothers' clothing budgets.

Clothing plans. On pages 581 and 582 are the clothing plans of two women. They are based on widely different income levels, at the prices that prevail in one city. How would they need to be altered to be applicable to homemakers in your community?



Nancy's of Hollywood

The older sister enjoys wearing well-chosen clothes.

SUGGESTIONS TO THE CLASS

1. From a mail-order catalogue or a pattern book, select a wardrobe for your mother for one year. Figure the cost if the items were purchased in a year's time.

2. With the list above, make suggestions as to how a needed wardrobe can be had under a definite income.

3. Visit two or more ready-to-wear departments and ask to see street dresses for size 16 and size 40, respectively. What differences can you detect in style values, quality of fabric, workmanship, and price between these two groups?

4. Make a study of your mother's activities for one day in so far as these affect her clothing needs. The report might include hours and minutes spent in (a) home duties; (b) shopping; (c) social activities; (d) resting; (e) recreational activities, such as swimming, golf, etc. Compare this report with a similar report on your own activities. What are the points of greatest

CLOTHING FOR THE MOTHER IN A FAMILY OF FIVE ON AN INCOME OF \$1,800 A YEAR

ITEM	PRICE	PERIOD OF SERVICE IN YEARS	YEARLY COST
1 Winter coat	\$35.00	3	\$11.66
1 Spring coat	15.00	3	5.33
1 Rayon street dress	9.00	2	4.50
1 Wool street dress	12.00	2	6.00
4 Cotton house dresses at \$2.00 each	8.00	1	8.00
3 Aprons at \$0.50 each	1.50	1	1.50
1 Winter hat	3.00	2	1.50
1 Summer hat	2.00	2	1.00
1 Pair fabric gloves	1.50	1	1.50
2 Pairs shoes at \$4.50 each	9.00	1	9.00
House slippers	1.00	1	1.00
Rubbers or galoshes	1.89	2	.95
Shoe repairs	3.00	1	3.00
2 Pairs hose at \$1.25 each	2.50	1	2.50
8 Pairs lisle hose at \$0.50 each	4.00	1	4.00
2 Cotton slips at \$1.50 each	3.00	1	3.00
2 Suits of panties and vests for winter wear at \$1.25 each	2.50	1	2.50
2 Suits of vests and panties for summer at \$1.25 each	2.50	1	2.50
3 Brassieres at \$0.75 each	2.25	1	2.25
2 Winter nightgowns at \$2.00 each	4.00	2	2.00
2 Summer nightgowns at \$1.50 each	3.00	1	3.00
1 Girdle	1.98	1	1.98
1 Purse	1.59	2	.79
6 Handkerchiefs at \$0.25 each	1.50	1	1.50
1 Compact . . . . .	.59	1	.59
Clothing repair, accessories, thread, snaps, buttons, etc.	1.50	1	1.50
TOTAL ANNUAL COST			\$83.05

difference? How may these differences be reflected in your respective clothing plans?

5. Check with ten homemakers to find out how many of this number follow a plan for maintaining their wardrobes. List the major items in their clothing expenditures for the past year.

CLOTHING FOR THE MOTHER IN A FAMILY OF FIVE ON AN INCOME OF \$4,500 A YEAR

ITEM	PRICE	PERIOD OF SERVICE IN YEARS	YEARLY COST
2 Dress hats (fall, spring).....	\$7.50	1	\$15.00
2 Street hats (fall, spring).....	5.00	1	10.00
1 Sports hat.....	5.00	2	2.50
1 Winter coat (fur trimmed).....	79.50	2	39.75
1 Spring coat.....	30.00	2	15.00
1 Sports coat.....	21.00	3	7.00
1 Evening dress.....	29.50	2	14.75
1 Dinner dress.....	35.00	1	35.00
1 Afternoon dress.....	29.50	1	29.50
2 Sports dresses.....	14.00	2	14.00
2 Summer dresses (cotton, spun rayon).....	7.50	1	15.00
3 Service dresses (cotton).....	3.00	1	9.00
1 Street costume.....	25.00	2	12.50
1 Lightweight suit.....	25.00	2	12.50
2 Blouses.....	3.50	2	3.50
3 Pairs dress shoes.....	8.50	3	8.50
2 Pairs street shoes.....	10.00	2	10.00
1 Pair sports Oxfords.....	6.50	1	6.50
1 Pair bedroom slippers (leather).....	2.70	3	.90
1 Pair galoshes.....	2.00	2	1.00
9 Pairs sheer hose.....	1.50	1	13.50
2 Crepe slips.....	2.25	1	4.50
2 Rayon knit slips.....	1.50	1	3.00
2 Girdles.....	7.50	2	7.50
2 Rayon panties.....	1.50	1	3.00
3 Rayon knit panties.....	1.00	3	1.00
3 Brassieres.....	1.00	1	3.00
1 Flannel bathrobe.....	8.00	4	2.00
1 Crepe housecoat.....	10.50	5	2.10
4 Nightgowns.....	3.50	2	7.00
2 Pairs leather gloves.....	3.50	1	7.00
3 Pairs fabric gloves.....	1.50	2	2.25
1 Evening bag.....	4.00	2	2.00
2 Street bags.....	5.00	2	5.00
2 Handkerchiefs for evening wear.....	1.00	2	1.00
12 Linen handkerchiefs.....	.69	1	8.28
1 Sports scarf.....	2.50	2	1.25
1 Umbrella.....	4.50	3	1.50
Incidentals and sanitary supplies.....			10.00
			<u>\$346.78</u>
Annual upkeep cost			
Cleaning and pressing.....			\$7.25
New heels.....			2.00
Shoe shines.....			1.50
			<u>\$10.75</u>
TOTAL ANNUAL COST			<u>\$357.53</u>

6. Make a comparison between the expenditures made for your mother's wardrobe and for your own for the past and present season. Include also the relative values of clothing carried over from the past season.

2. What are the clothing needs of the father?

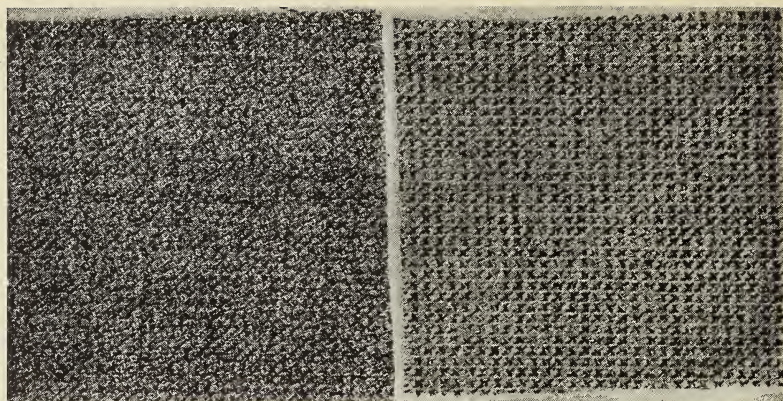
"Aren't men people?" A father, walking with his high school daughters through a main thoroughfare in the city, paused with them again and again so that the sumptuous displays in the department store windows might be fully appreciated.

Feminine manikins clad in chiffon, velvets, taffetas, and furs took the center of each setting. In one case only was there a masculine manikin presented, and his role was obviously that of serving as a foil for the feminine apparel. The father pointed out the small space accorded his sex in the exhibits and queried, "Now, why is this? Aren't men people?"

Factors affecting the needs. It might not be a bad idea to consider men as people, and the father of the family as a person whose clothing needs, though different, are quite as real as those of his daughter. His occupation will be one of the factors that affect his clothing needs. If he is a mechanic, coveralls are one of the necessary items in his wardrobe. If he is a dentist, he may need many white coats to maintain himself in the cleanliness required in his profession. If he is a salesman, he will need well-tailored suits for his everyday wear. A man's wardrobe, like that of his daughter, should be related to the activities which make up his day.

If the custom of the town requires that a man wear formal apparel at social events, his wardrobe may include a tuxedo. If custom does not demand such dress, there is no need for the expenditure. If the man enjoys golf, he may want special sports attire; if he dislikes golf as a sport and scorns "slacks" as part of an unexplainable craze, there is little reason for his owning such apparel.

Characteristics of men's clothing. In general, men's clothing is more definitely standardized than is that of women. Suits are standardized as to color, texture, weave, and cut, so that among the more conservative men the most marked change seems to be from an oxford gray suit and a gray felt hat to a light gray suit and a straw hat. Full expression of a man's individuality may be given in his selection of neckties—pro-



Fabrics popular for men's suitings.

vided they are of his own choice. But even neckties are not truly seasonal in their character. Because of the small fashion change in men's apparel from season to season, fine quality of fabric and good tailoring determine the desirability of a suit. Homespun, chevots, gabardines, serges, flannels, and tweeds are fabrics commonly used for men's suits. Whatever the type of fabric, if it is supposed to be wool it should be 100 per cent wool, and completely preshrunk. The anticipated wear from a suit of clothes is three years. If the fabric is not sturdy and serviceable, the period of satisfactory wear will be greatly lessened.

Have you ever noticed the provision for comfort made in men's shoes? Broad of toe, flat and low of heel, these shoes seem devised to speed the wearer on his way. As is the case in shoes for women, the grade of leather used and the manufacturing procedure followed affect the probable period of satisfactory service.

Men's overcoats are characterized by perfection of tailoring. There is an utter lack of such trimming detail as is often found on women's coats. Although there are overcoats designed for dress occasions, as well as for general utility and for strictly sports wear, all are fairly well standardized within their class, as to color and cut. Men's hats, whether they be of felt or straw, show but slight variation in design from year to year. The addition of a tiny feather tucked into the ribbon band is as much of a departure from the simplest of trimmings as is usually found. The adherence to such a standard permits the wearing of either coats or hats until at least a reasonable amount of service has been had. The waste which follows the rapid change in fashion for women's apparel is not as marked in clothing for men.

**CLOTHING FOR THE FATHER, WHO IS EMPLOYED AS A SALESMAN,
IN A FAMILY OF FOUR ON AN INCOME OF \$1,800 A YEAR**

ITEM	PERIOD OF SERVICE IN YEARS	UNIT PRICE	YEARLY COST
1 Felt hat.....	1	\$5.75	\$5.75
1 Straw hat.....	1	2.34	2.34
1 Cap.....	3	1.37	.46
1 Overcoat.....	6	47.25	7.88
1 Raincoat.....	3	17.50	5.50
1 Pullover sweater.....	4	5.00	1.34
1 Tuxedo suit.....	10	50.00	5.00
3 Business suits.....	3	37.50	37.50
1 Black tuxedo vest.....	6	4.46	.74
1 Pair flannel trousers.....	3	15.00	5.00
1 Pair dress shoes.....	4	9.00	2.50
2 Pairs business shoes.....	1	6.00	12.00
1 Pair house slippers (leather).....	5	3.50	.70
1 Dress shirt.....	3	3.00	1.00
8 Shirts with collar attached.....	1	2.00	16.00
4 Pairs black rayon socks.....	2	.57	1.14
6 Pairs black lisle socks.....	1	.35	2.10
4 Undershirts.....	1	.60	2.40
4 Pairs shorts.....	1	.60	2.40
1 Flannel bathrobe.....	8	5.46	.68
4 Pairs cotton pajamas.....	2	2.50	5.00
1 Black bow tie.....	3	.90	.30
8 Four-in-hand ties.....	2	1.00	4.00
12 Cotton handkerchiefs.....	2	.20	1.20
1 Pair gloves.....	2	2.63	1.32
1 Belt.....	2	1.98	.99
2 Pairs suspenders.....	2	1.79	.89
2 Pairs garters.....	1	.50	1.00
1 Billfold.....	4	3.98	.99
			<u>\$128.12</u>
Annual upkeep cost			
Cleaning suits.....	4 @	1.00	4.00
Pressing suits.....	6 @	.75	4.50
Blocking hats.....	1 @	.75	.75
Half soles and heels.....	3 @	1.25	3.75
			<u>\$13.00</u>
TOTAL ANNUAL COST			\$141.12

Clothing plans. The clothing plan on page 486 and the one above are for men in two different occupations. As you scrutinize them, check the list for items that arise in the occupation followed and for those that are determined by the social life of the individual.

SUGGESTIONS TO THE CLASS

1. Using a suit of the color you believe most becoming to your father as the basis, choose such articles as socks, tie, and handkerchief to complete the outfit and make it a harmonious whole in regard to color and texture.
2. Obtain illustrations of five different topcoats and overcoats of various types and fabrics. List the type of wear for which each is appropriate.

3. Bring to class samples of six fabrics suitable for men's suits for summer wear. List the possible advantages and disadvantages of each.

CLOTHING PLAN FOR MAN OR BOY EMPLOYED AS A LABORER

ITEM	UNIT PRICE	PERIOD OF SERVICE IN YEARS	YEARLY COST
1 Overcoat or sheep-lined moleskin jacket.	\$16.00	4	\$4.00
1 Suit.	24.00	3	8.00
2 Pairs work pants.	2.95	1	5.90
2 Pairs overalls.	2.50	1	5.00
1 Sweater.	2.95	2	1.47
6 Work shirts.	1.50	1	9.00
2 Dress shirts.	2.50	2	2.50
1 Felt hat.	2.50	2	1.25
1 Cap. . . . .	.75	1	.75
6 Pairs work gloves (canvas). . . . .	.15	1	.90
2 Pairs work shoes.	5.00	1	10.00
1 Pair dress shoes.	4.95	1	4.95
2 Shoe repairs.	1.00	1	2.00
1 Pair rubbers.	1.25	1	1.25
10 Pairs cotton socks. . . . .	.29	1	2.90
2 Pairs lisle or rayon socks. . . . .	.45	1	.90
3 Winter union suits.	2.00	2	2.00
2 Summer union suits.	1.25	1	2.50
3 Pajamas.	1.50	2	2.25
2 Ties.	1.00	1	2.00
4 Handkerchiefs. . . . .	.20	1	.80
1 Belt or suspenders.	1.50	1	1.50
Dry cleaning, haircuts, and toilet articles.			15.00
TOTAL ANNUAL COST			\$86.82

3. *How shall clothing for the infant be selected?*

Overdressing the baby. Not infrequently you hear the statement, "She dresses that baby as if it were a doll." From the facial expression of the speaker and the tone of her voice one would judge such practice was to be commended. However, there are objections which seem self-evident. A baby is a living, cooing, kicking individual with a petal softness of cheek, a well-formed body whose development must be considered, and a mind that must be respected, despite its immaturity. Babies protest with vigorous wails when subjected to the scratching and prickling torment of a stiff, starched organdy bonnet, or to the frustration of garments that bind and hamper the free movement of waving hands and kicking feet. Babies drool without regard for their outfitting; and silken capes, satin carriage bows, and the like soon lose their freshness, sadly reflecting the lack of wisdom on some-



Garments arranged for dressing the baby. Note that one fits within the others in such a way that the dressing may be completed with as few movements as possible.

one's part. Babies are indifferent to fine, hand-embroidered scallops and dainty embroidery. They have not yet a social consciousness that makes them aware of clothing as a means of self-expression. They should not be in attendance at social events, and hence their clothing need not reflect consideration of a prevailing mode or fashion.

Softness and comfort. The most important consideration in the choice of clothing for a baby's layette is that the garments be made of fabrics that are absorbent, soft, and nonirritating to the petal-soft skin. Garments worn next to the skin should have flat seams. The design of the garment should be simple, free from entangling bows and ruffles, and of such character that it may be put on or taken off without causing discomfort to the child. Being shut away from the world by clothes is as frightening to a wee baby as being shut away by doors is to the toddler and runabout. Then, too, the garments should permit freedom of motion. Kicking is as important to a baby as walking is to you, even though it seems less purposeful.

Ease of laundering. Another absolute essential to the wise choice of clothing for the infant is that each and every garment should be such that it can be easily and satisfactorily cleaned by laundering. If you do not know the amount and sort of care necessary to keep a baby's clothes



The garments in a telescoping layette.

in condition, it would be well for you to check on this matter with the mother of an infant. You will find that all articles in the layette are laundered with the care advised for the laundry of fine cotton and woolen fabrics. Harsh soaps and strong water softeners are avoided because of their bad effects on the baby's skin.

Minimum essentials. The following list is given by the U. S. Children's Bureau as inclusive of the minimum essentials for the average newborn baby.

Diapers (dozen)	4-6
Knitted bands	2-4
Knitted shirts	2-4
Nightgowns	3
Slips or dresses	4-8
Stockings (pairs)	4
Sweater	1
Flannel squares (outdoor wrap for newborn)	3
Cloak and cap, thin	1
Cloak and cap, heavy	1

Free from display. The clothing for the baby should be planned for his health and comfort, and hence should be entirely free from elaboration and any attempt at display. Such a requirement leads as a matter of fact to the acceptance of simplicity, ease in cleaning, and freedom from nonessentials. The design of the garments should be such that they may be put on the child without causing him too great discomfort.

Almost anyone who has watched a tiny baby have his bath and then have a variety of garments pulled in turn over his head, has given an emphatic response to the helplessness, shut-awayness that each restricting garment caused as it shut off the face and then the arms from the world outside. *Telescoping garments* have been designed, all of which open down the front and fit one within another. Their use makes it possible to place the baby in the outfit, his band and diaper already in position, slip his arms into the sleeves, once and for all, and then do the necessary fastening without further inconvenience to either the child or the mother.

SUGGESTIONS TO THE CLASS

1. Obtain from the American Red Cross, as an exhibit for your class, a layette which they provide for needy families. Also obtain a layette from someone in your neighborhood. Discuss the two layettes, considering cost, ease with which the garments may be cared for, comfort to the child, and ease with which the garments may be put on and taken off.

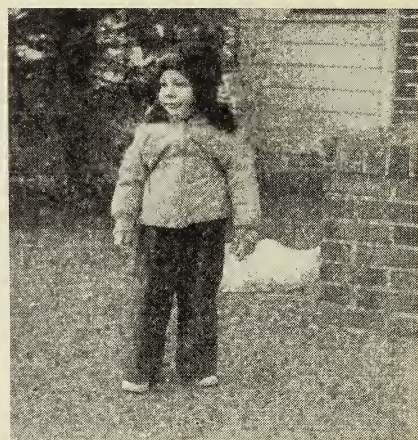
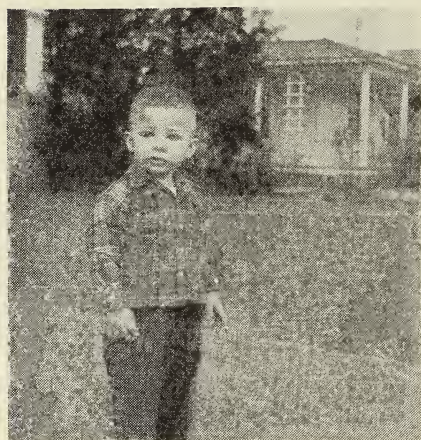
2. Visit a department store in which infant's wear is sold. Ask the salesperson to show you layettes that may be purchased at different prices.

3. Ten dollars is available for a layette. Plan an adequate supply of apparel for an infant. Consider that many of the articles may be made in the home, and that some may be made from articles on hand.

4. Bring to class samples of materials that are suitable for garments for the infant.

4. How shall clothing for the preschool child be selected?

Activity of preschool child. The preschool child differs from the infant in several important respects. He has gained the power of locomotion. Instead of spending his energy in kicking, waving, and cooing, he now goes places and sees things! He crawls, creeps, rolls, toddles, runs—in fact, his activities are such that his whole body is brought into play. He has gained the ability to perceive colors and may like one hue and have a violent distaste for another. He has pushed out the boundaries of his world so that it now includes not only the carefully controlled warmth and light of the nursery but also the playground in the backyard or nursery school, and the adventurous trips about the neighborhood, made while safely clinging to his mother's hand.



Children's clothes vary with the season and climate, but always allow freedom and ease in movement.

Freedom of movement. His clothing should be light in weight, warm enough to provide adequate protection from cold, and so cut that freedom of movement is not restrained. Clothing that restricts activity either because it is improperly cut or is too small may have a most unfortunate effect on the child's disposition. The cut of the garment should be checked to make sure it provides adequate length on the line of the crotch. A short length on the crotchline from the waistline to the leg seam is a common fault of many ready-to-wear garments for children. The garment should also have a large armseye. Binding and cutting in the armseye with the motion of the arm takes joy out of action and tends to create a "spoil sport." The finish of the garment at wrist and knee should be such as to make free movement possible and remove all danger of pinching.

Ease in putting on garments. It is desirable that the toddler and the older children of preschool age be encouraged to learn to dress themselves. This goal is facilitated if the clothing is reduced to a minimum of pieces, simple in construction, with openings and plackets long enough to be serviceable and so located as to be easily opened or closed. The fasteners used should be reduced to a minimum, and these should be so located as to be easily handled. For front openings, slide fasteners or buttons from three-fourths to one inch in diameter, used with cloth or cord loops, have been found the most satisfactory fasteners from the standpoint of the ease of handling by the child.

Garments required. A young child need not wear many garments. A preschool boy may wear a union suit with garters attached, if stockings are required, or socks and sandals or shoes and a one-piece suit. A preschool girl may wear panties on a vest, socks or stockings with shoes or sandals, and a dress. In either case, if greater warmth is needed, it should be obtained by the addition of outer garments of wool. If the additional protection needed is slight, warmth may be assured by the use of a knit sweater. If the weather is severely cold, an engulfing snow suit is ideal. A suggested wardrobe for a preschool child is shown on page 492.

Fabrics used. What fabrics may advantageously be used for these articles? The underwear should be knitted, as that method of construction provides a fabric that is a good nonconductor of heat, is highly elastic, and is easily laundered.

The play suits or dresses should be of cotton material, attractive in color and line, easily laundered, and serviceable. The fabrics should be fast of color and fully preshrunk. Chambray, gingham, kindergarten cloth, and poplin are among the popular fabrics for children's dresses.

MODERATE CLOTHING BUDGET FOR GIRL OF FOUR

ITEM	UNIT PRICE	PERIOD OF SERVICE IN YEARS	YEARLY COST
2 Berets	\$1.00	2	\$1.00
1 Coat and leggings	8.50	2	4.25
1 Raincoat and hat set	3.75	2	1.87
1 Pullover sweater	3.65	1	3.65
2 Party dresses of cotton (1 for fall, 1 for spring)	1.95	1	3.90
6 Play dresses (3 others left over)	1.90	1	11.40
2 Coveralls	1.00	1	2.00
1 Pair slippers	2.70	1	2.70
4 Pairs Oxfords	3.85	1	15.60
1 Pair bedroom slippers (felt)	1.85	1	1.85
1 Pair rubbers . . . . .	.95	1	.95
2 Pairs rayon socks . . . . .	.40	1	.80
4 Pairs cotton socks . . . . .	.25	1	1.00
2 Slips	1.00	1	2.00
6 Panties (rayon) . . . . .	.48	1	2.88
4 Union suits	1.00	2	2.00
4 Waists . . . . .	.50	2	1.00
1 Bathrobe	2.00	2	1.00
3 Sleeping garments	2.00	2	3.00
3 Summer pajamas	1.00	2	1.50
6 Cotton handkerchiefs . . . . .	.35	1	2.10
1 Pair knit gloves	1.75	1	1.75
TOTAL ANNUAL COST			\$68.20

Color and design. The color and the design of the garment chosen should be acceptable to the child. Otherwise the garment may be the center of storm scenes. A child resents being made different from his little group quite as much as his older sister does.

Body proportions. If you think of the child as presenting the proportions that should be observed in the design of his garments, you will find that his body is almost straight, lacking the curves that characterize the adult form. In the infant the head seems relatively large in proportion to the rest of the body, and the legs seem disproportionately short. The rapid growth in the legs is evidenced when a child loses its chubbiness and his body proportions begin to develop toward those of the adult.

Making the garment. The making of children's clothes presents no unusual problems. They require the same precautions as are taken with other sewing. It is advisable to use a pattern that has been chosen for the child for whom the garment is to be made, in order to prevent an excess of alterations. Patterns for children's clothes are marked according to age. This does not mean that a child five years old will always require an age five pattern. The correct size may be determined by taking the child's chest measurement, and finding the age to which it corresponds.

When the material and pattern have been selected, the usual procedure of garment construction for cotton clothes will follow. Any necessary alterations, such as may be required to provide for freedom of movement, should be made on the pattern.



The French seam.

Well-finished, strong seams are desirable. For this reason we find the

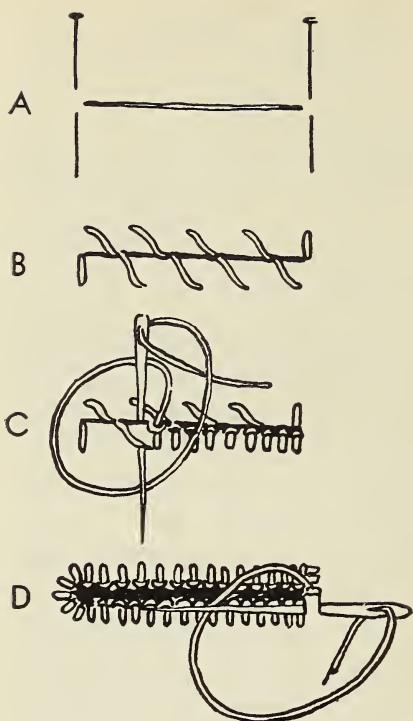
French seam very satisfactory in a girl's dress, while in a boy's suit and in girls' undergarments the flat fell seam is most desirable. In each case the finished garment will have strong seams, and will have no raw seams on the wrong side. The latter is desired because the activity of the child often causes the wrong side of seams to be visible when the garment is worn, and because the raw edges may irritate his skin.

French seam. French seams are dainty, small, neat, and strong, with no visible stitching on the right side. The inside seams are enclosed, really forming a seam within a seam. This seam is suitable only for lightweight materials which must withstand laundering. It is commonly used in making slips, gowns, and children's dresses. It is better adapted to use on some styles of garments than on others. It is rarely recommended for armseye seams, and cannot be used on shaped edges, such as those of pointed yokes and curves, nor on long seams which may tend to draw. It is not good for use on garments that are fitted.

The construction of the French seam proceeds in the following steps: Place the wrong sides of the material together and baste on the desired seamline; stitch one-eighth to three-sixteenths inch on the outside of this basting. Remove basting and trim the edges to a little less than one-eighth inch from stitching. Turn the garment to the wrong side, and press the seam flat on the wrong side, creasing along the stitched edge. Fold the material so that the right sides are together, creasing the edge directly on the line of stitching. Baste one-eighth to three-sixteenths inch from the edge, and stitch close to the basting, which should be on the seam allowance line. Remove the basting and press the seam.

In order to meet accepted standards, French seams should be even in width, one-eighth to three-sixteenths inch and never more than one-fourth inch wide. There should be no yarn ends protruding from the seam on the right side of the garment.

Fastenings on children's clothes should be both large enough and so placed that the child may fasten or unfasten them without help. Bound

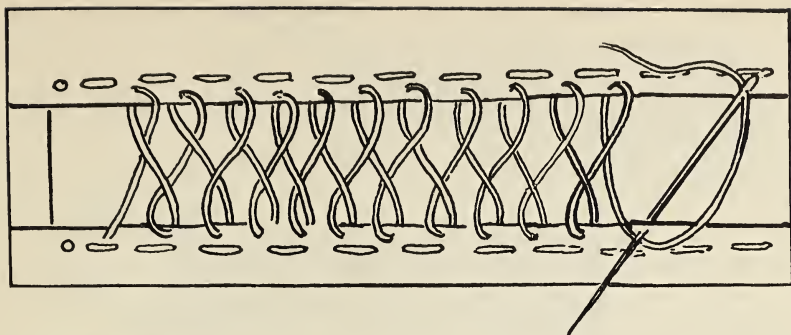


The worked buttonhole. *A*: The slash. *B*: The edges overcast. *C*: The method of making the buttonhole stitch. *D*: The method of making the bar end.

With the needle in this position, and the buttonhole held in the original position, begin the buttonhole, working toward the left. Bring the needle through the cloth, taking as deep a stitch as desired in the finished buttonhole. When the needle is a third of the way through the cloth, take the thread coming from the eye of the needle and bring it down toward you and then under the point of the needle, going from right to left. Bring the needle through the loop, pulling the thread up and away from you. The thread should be pulled tight and the purl thus made should be on the exact edge of the slit. Repeat this process across the buttonhole, keeping the stitches the same depth and the threads lying close to each other but not crowded. When the opposite end is reached, make a fan around the end by holding the buttonhole on the end of the finger and taking five or seven stitches around the end, having the purls very close and the stitches in the material far enough apart to make a half circle. The last stitch made should put

and worked buttonholes are both used. Slide fasteners are also convenient.

Worked buttonholes. The worked buttonhole, so made that the strain will come at the end nearest the edge of the opening, seems to be the most desirable. The worked buttonhole should be one-sixteenth of an inch longer than the diameter of the button, and should be worked on the garment with a line of basting. Mark all buttonholes before any are cut, and check carefully to know they are in the proper place. Cut on the basting line, with the thread of the material. With the cloth held over the first finger so that the cut edge lies lengthwise, overcast the edges from right to left, taking shallow stitches, and just enough to prevent the edges from fraying. Bring the last overcast stitch out on the right side at the lower right-hand corner.



The fagoted seam.

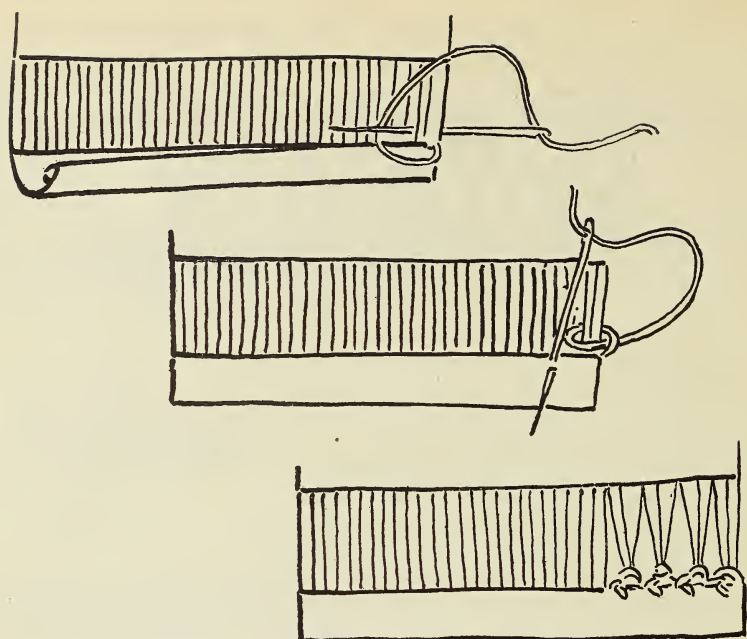
you in position to make the opposite side of the buttonhole. When this is completed, you may fasten your thread by taking two or three small stitches across the end on the wrong side; or, if a strong end is desired, you may make a bar. This is done by taking three or four stitches across the slit, having the stitches come from one hole. Hold the work so that the bar lies straight across the end of the finger, and work over these stitches with the buttonhole stitch—or the blanket stitch may be used—having the purl edge lie toward the buttonhole. In working over the threads, let about every other stitch catch into the material, so that the bar will be held in place. Fasten the thread by bringing it to the wrong side and making a fastening stitch.

Some mothers use handwork on the dress-up clothes of their children; and when such decoration is well chosen and carefully applied, it adds a note of distinction. The following are some forms of handwork that we find used which are easy to do.

Pleated or gathered frills with tiny rolled hems, small tucks, fagoting, and hemstitching are commonly used.

Tucks. Tucks may be of any desired width, but are usually not more than three-eighths of an inch. In putting in tucks, one must first measure the material and allow twice the width of each tuck times the number of tucks to be made. This, plus the width of the area to be covered, gives the width of the material needed. If a tucker attachment is used, the first tuck must be measured, basted, and stitched. After the stitching of the first tuck, the fold of each succeeding tuck will be measured as the preceding one is stitched.

Tucks are frequently used in series, as three or five, then a space, followed by a repetition of the series. The space should bear a pleasing relation to that occupied by the series. They may be used in a simple repetition. Tucks may be sewed in by hand with a running stitch or



Steps in the process of hemstitching.

some decorative stitch, such as a chain stitch, or they may be sewed in by machine. Machine stitched tucks are by far the most common.

Fagoting. When fagoting is to be done it is necessary to have two finished edges. These edges are made by turning in the raw edges as for a hem. The pieces to be fagoted together are fastened to stiff paper, with the desired space left between the edges. Working from left to right, the needle is brought out on the lower edge, and with the thread to the right and under the needle—a position perpendicular to a folded edge—a small stitch is taken in the upper edge, a short distance from where the thread came out. With the next stitch in the lower edge, the needle again is perpendicular but must point up instead of down. This tends to place the stitches in alternate positions in the upper and lower edges, forming diagonal lines between the pieces of material. Fagoting requires a special thread; it may be cotton, linen, or silk.

Hemstitching. Hemstitching may be used purely as a trimming, or it may serve as both a trimming and a means of holding a hem in place. In preparing to hemstitch, it is necessary to draw several threads. The first one drawn should be at the line of the edge of the hem, the rest coming away from the edge of the hem. The number of threads to be drawn will vary with the desired width. The hem is then basted in

position in the usual manner. With the hem held toward the worker, parallel to and over her forefinger, and with the material wrong side out, the thread is fastened with a knot under the fold of the hem.

Holding the left thumb over the thread that comes from the needle, pass the needle from right to left back of a small group of threads, and pull through. With the thread held again by the thumb, the needle is passed back of the same group of threads, and the loop is drawn tightly around the group as the needle takes up a tiny stitch to the left of the loop. Repeat the process throughout the desired length.

As in all other garment construction, a desirable plan of work should be followed in making a child's garment. This not only insures a better made garment, but it enables one to see ahead and to realize the problems to come, before they are suddenly reached. A well-fitted child's garment should be as desirable a goal for the maker as though she were making the garment for herself.

SUGGESTIONS TO THE CLASS

1. Select a number of dress designs that you think are well suited for making a linen garment. Choose one that you think will be well suited to your needs.

2. Demonstrate your ability to construct a satisfactorily bound pocket according to the directions given in your text. What will determine whether the binding shall be cut on the straight or on the bias? What will serve as a satisfactory finish for the raw edges on the wrong side?

3. Practice making a 3-inch length of fagoting; of hemstitching.

4. Outline the steps in making a two-piece tailored dress.

5. *What is to be considered in the choice of clothing for the school child?*

Durability and ease of laundering. If you will watch a group of school children homeward bound at the close of the school day you can readily list some, if not all, of the basic requirements of desirable clothing for this age group. The boys wrestle and scuffle, the vigorous twists and pulls putting severe strain on the fabric and fastenings of their clothes. Sooner or later, one, two, three, or more of them roll on the dusty or muddy ground. Thus they complete, by the contact with Mother Earth, the soiling of garments previously begun by the chalk dust and pencil grime of the classroom, and possibly the smear of chocolate from a candy bar illicitly consumed. Clothing for the schoolboy must be

made of sturdy, durable fabric, well constructed, readily laundered, and so designed as to provide ease and freedom of movement. The school-girls who flock out may, at first, seem more ladylike. There may be no wrestling or pommeling, but there will be a mad chasing at games of tag, unexpected and sudden spills from roller skates, and possible disastrous skids in such games as hide-and-seek, that bring the victim prone to earth. In the case of the schoolgirl, as of the schoolboy, the need is for well-designed garments that provide ease and freedom of movement, sturdily constructed and made of durable fabric that is easily laundered.

Weather. Both the boy and the girl will be out in all kinds of weather. They may need protection from rain, sun, snow, and wind. The character of the climate determines certain important items in the wardrobe, such as coats, sweaters, raincoats, and rubbers.

Local and group customs. At this age boys and girls alike are more conscious of group opinion than they may be again. It is absolutely painful to them to be forced to dress differently from their schoolmates, even though their own apparel might have the higher approval of Fashion's dictators. In a school where all the boys wear overalls, the lad dressed in blue serge becomes self-conscious and fearful lest he be the "sissy" that his classmates proclaim him to be. A girl who is forced to wear a ruffled apron over a dress because her mother thinks it is quaint and charming may find her days made tearful by the gibes of her gingham-garbed classmates. Consideration should be given to the local customs in the matter of dress, so that children may not suffer the hurt of being outcasts from what is to them the most important group in society—their own school crowd.

Standardized designs. Because the group sense is so strong at this age and the development of physique and personality is far from taking its final form, the use of relatively standardized designs seems to meet the need of the school child. There is far less annual change in fashions of dress for schoolgirls and schoolboys than for the age group that follows. Consideration should be given to the colors becoming to the child and to his or her color preferences. If there is a conflict between these two, it may be more important to defer to the individual preference. Self-expression in dress will improve only with exercise. The purchase of a shirt with horses galloping over it or of a dress that is of a faddish hue and not particularly becoming to the wearer, may be an inexpensive means of teaching an art lesson not otherwise learned by the individual.

GIRL—TWELVE TO SIXTEEN YEARS OLD

ITEM	UNIT PRICE	PERIOD OF SERVICE IN YEARS	YEARLY COST
1 Winter coat	\$17.95	2	\$8.98
1 Spring coat	15.00	3	5.00
1 Winter dress	12.95	2	6.48
1 Summer dress	4.95	2	2.48
3 Wash dresses	3.00	1	9.00
2 Skirts	3.95	2	3.95
2 Sweaters	2.95	2	2.95
1 Summer hat or beret	1.00	1	1.00
1 Winter hat	2.88	1	2.88
1 Pair gloves	2.59	1	2.59
1 Gym suit	1.89	2	.95
3 Pairs shoes	4.50	1	13.50
1 Pair tennis shoes	1.89	2	.95
1 Pair rubbers or galoshes . . . . .	.79	2	.40
3 Shoe repairs . . . . .	.89	1	2.67
6 Pairs anklets . . . . .	.35	1	2.10
3 Pairs hose, nylon	1.39	1	4.17
3 Slips	1.98	1	5.94
4 Pairs panties . . . . .	.55	1	2.20
4 Gowns or pajamas	2.00	2	8.00
2 Garter belts or elastic . . . . .	.50	1	1.00
6 Handkerchiefs . . . . .	.35	1	2.10
1 Scarf	1.00	1	1.00
1 Coin purse . . . . .	.50	1	.50
Toilet articles			2.00
TOTAL ANNUAL COST			\$92.79

BOY—TWELVE TO SIXTEEN YEARS OLD

ITEM	UNIT PRICE	PERIOD OF SERVICE IN YEARS	YEARLY COST
1 Finger-tip coat	\$14.50	2	\$7.25
1 Suit	18.95	1	9.48
1 Pair extra trousers	3.95	1	3.95
1 Pair slacks or gym shorts	1.00	1	1.00
1 Sweater	3.95	1	3.95
5 Shirts	2.79	1	13.95
2 Caps	1.00	1	2.00
1 Pair gloves	1.59	1	1.59
4 Pairs shoes (includes 1 pair for winter)	6.25	1	25.00
4 Shoe repairs . . . . .	.89	1	3.56
1 Pair tennis shoes	1.89	1	1.89
12 Pairs hose . . . . .	.45	1	5.40
3 Winter union suits	1.79	2	5.39
3 Summer under suits	1.59	1	4.77
2 Winter pajamas	2.25	2	2.25
2 Summer pajamas	2.00	2	2.00
3 Ties	1.50	1	4.50
6 Handkerchiefs . . . . .	.35	1	2.10
1 Belt	1.75	1	1.75
Haircuts and toilet articles			6.00
TOTAL ANNUAL COST			\$107.78

Clothing plans. Does it cost more to dress a boy than it does a girl? This is an oft-debated question to which the usual reply is, "It depends on *the* boy and *the* girl!" The clothing plans given on page 499, for a boy and girl respectively, point to differences in the items included as important on even a limited clothing allowance, and afford a basis of comparison of typical expenditures for each.

SUGGESTIONS TO THE CLASS

1. Bring to class some children's garments that are well made. Compare the seam finishes with those used in clothes for adults.

2. Study a number of garments to determine what may be used satisfactorily to trim clothes for children. What requirements should trimmings meet? How will this vary with the age of the child?

3. Select some illustrations of children's clothing that show a satisfactory use of fancy stitches as an important element in the design of the garment. How can one determine the amount of time that should be spent in so trimming children's clothes?

4. You have a sister ten years old. Compare the type of clothing that she wears with that which you wear. Consider the variety of material to be found in the two wardrobes, the variety of costume included in each wardrobe, and the color and design of the material. How does the cost of her clothing compare with that of yours?

5. Compare the clothing of the preschool boy with that of the eight-year-old boy, considering color and design of material, type of garment, and kind of material used.

6. Plan a full wardrobe for a girl twelve years old. Select materials that you believe would be desirable, and choose the accessories to be used. Estimate the cost of such a wardrobe.

6. What are the special needs of the older daughter?

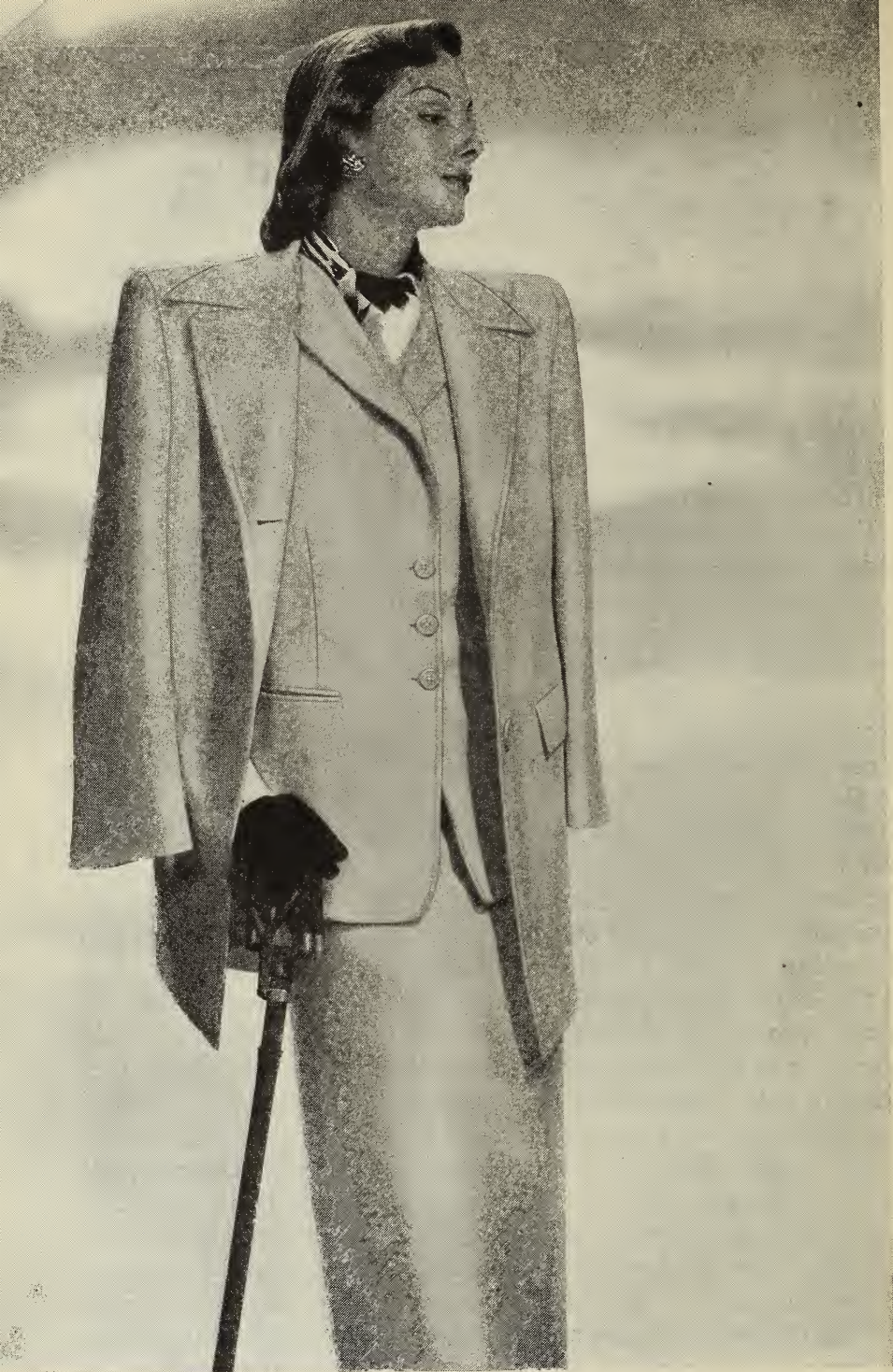
If you will be quite honest with yourself, you will probably realize that just a little envy is sometimes mixed with your feeling of admiration for your older sister. She does have many privileges that are not yet granted to you. And it does seem that she has so many needs that some of your desires have to be pushed into the background. Is it fair to you and the other members of the family that this sister, because she is a few years your senior, should be granted special concessions? A little thought given to the matter will probably lead you to agree that the

older daughter in a family has some problems that make for special demands on the clothing budget.

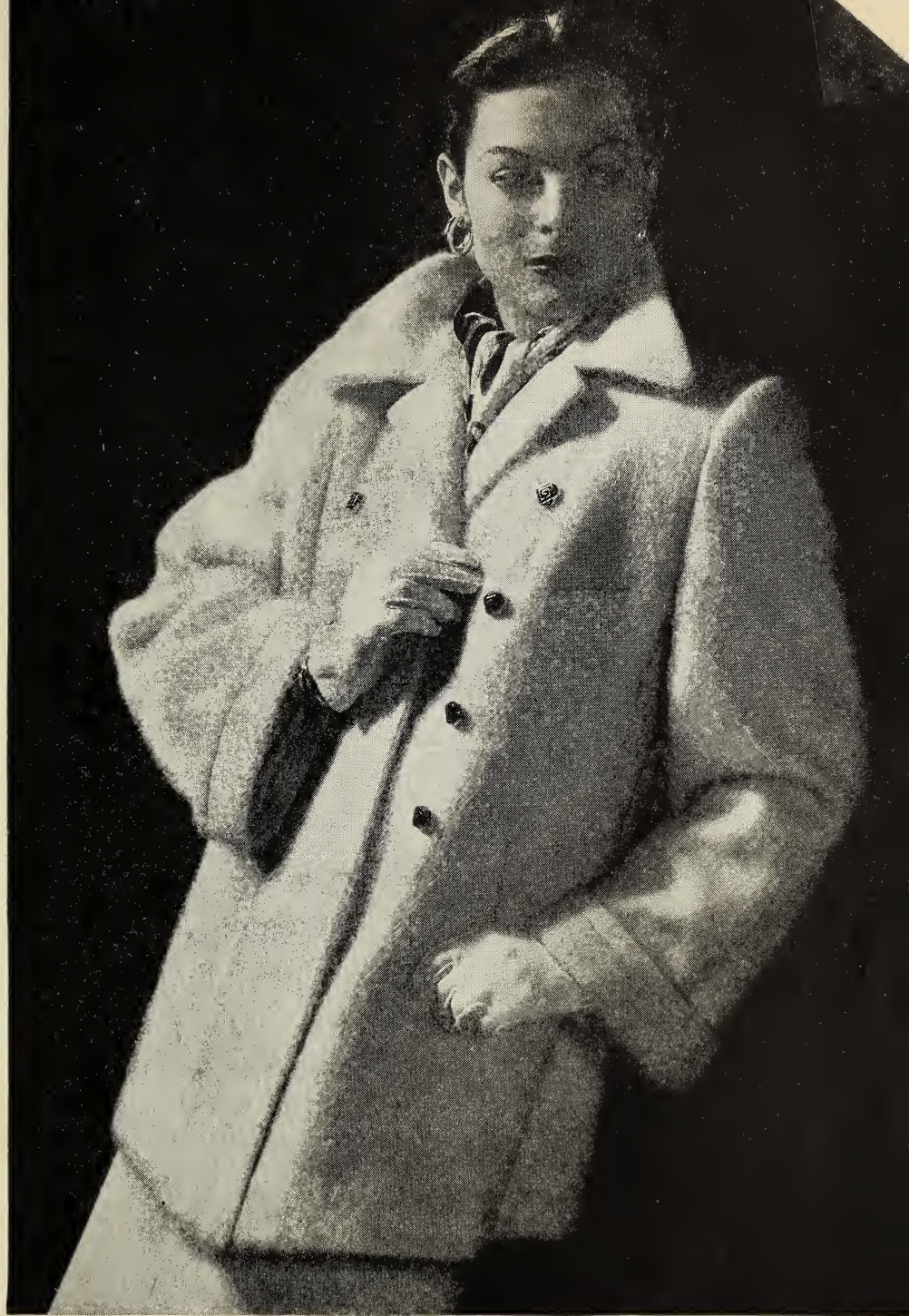
Those who have given careful thought to satisfactory relationships between family members believe that the years following high school, perhaps those years between eighteen and twenty-five, are among the most important in a young person's life for the establishment of social and business relationships. During these years many girls plan to establish themselves in some kind of work, or go to college, or perhaps marry and take over the management of their own homes. Whatever the plans for the future, usually there is involved much change from living as a member of a closely knit family. There will be a desire on the part of her family to help this older daughter make a satisfactory start. What will be her special needs?

The girl entering the business world. Among the first things that the girl entering the business world will think about is outfitting herself appropriately. The demands of some types of work so far as clothing is concerned are quite rigid. Office jobs usually permit a wide range for personal choice in dress within the limits of tailored clothes. The girl who has been accepted as a receptionist is expected to present a well groomed and an especially trim appearance on all occasions because she is the person who comes in contact with all customers or clients. Girls employed in retail stores often have their work dress prescribed, both as to color and style. It is apparent, with requirements such as these to be met, that an important part of the wardrobe may need to be replaced at the time the new job is undertaken. Garments especially suited to the position are a part of her obligation. The plaid skirt and sweater and the anklets and flats of high school days will probably have little place in the life that the girl, newly employed, has entered. And because it is necessary to be appropriately dressed to hold the job, business girls will often have to buy what seems more than their share of clothing as they enter the field. There also are some other expenses that must be planned for, especially when a position is accepted in another town than the one where the girl's family lives. For the first time she may need luggage of her own, an item that is relatively expensive. She will also need some travel money, and some money for expenses.

The girl who is planning to be married. The elaborateness of the preparation made for a wedding depends upon a number of things. Among the important ones are the wishes of those people immediately concerned and the scale of family living. The amount of money that the family has to spend for a wedding should also be recognized as im-



The three-piece suit is a long-time favorite for different age members of the family.



Nancy's of Hollywood

This coat is well chosen for evening wear for the older sister. She may also wear it on other dress-up occasions.



Nancy's of Hollywood

A simple, well-made dress, suitable for various occasions, is many times chosen by the older girl of the house.

portant, setting up definite limitations for the girl's trousseau and for her hope chest. The length of time allowed for preparation for the wedding will likewise place limits on the elaborateness of the affair. If there are only a few days in which to make hurried plans, the wedding will of course be simple.

The girl who is planning to marry may have a wardrobe that is very simple. She may appropriately be married in a suit or a street dress if she wishes. Or she may go to the other extreme and be married at an elaborate church function, clad in satin with sweeping train, attended by numerous bridesmaids and flower girls. Such wedding plans are advisable only if the family income is ample. The majority of girls will take the middle road, and plan a trousseau that is simple, practical, and extremely wearable, even to choosing a wedding dress that can be worn for other occasions, and which will provide them with a few new ensembles worthy of the important occasion.

Besides clothing, the girl who is planning to be married often looks upon a hope chest as important. Sometimes these household linens are an accumulation of small purchases or are birthday and Christmas presents that have been stored away. Many girls nowadays plan to purchase such articles as are needed for the household at the time they are ready to use them.

The girl who goes to college. The girl who goes to college also has special needs. Hers are not like those of the girl who leaves home to accept a position in the business world. She needs campus clothes in abundance, simple street clothes, and some for special social occasions. And because her time is given to classroom work, there must be a regular allowance of money, not only to take care of her living expenses, but also for fees and tuition. There are clothing guides for this girl, just as there are for the business woman and the bride-to-be. Retail stores and women's magazines offer lists of suggestions that may be revised to meet individual needs.

The older daughter in the family, then, deserves special consideration. Her needs are real and often so extensive as to seem out of proportion to those of other family members. But as far as her family is financially able, it will wish to offer assistance in establishing her satisfactorily in her place of life.

SUGGESTIONS TO THE CLASS

1. Plan a wardrobe for a girl entering a field of business. She has \$75 with which to provide needed clothes for her new position.

2. A girl who plans to be married has been working and has saved \$150 with which to buy new clothes. How shall she spend this money to have the most satisfaction from it? What would you add if the available money was as much as \$275?

3. This same girl has set aside \$100 with which to buy household linens. Plan what she should buy.

SUMMARY

Not only the high school girl but also every member of her family has clothing needs for which provision must be made in the family budgets. The needs of each member are determined by his age, his group, his activities, and his interests. The awareness of each affords a basis for a wise and reasoned approach to the making of personal clothing plans.

Sometimes the pressure of a clothing want is great. The possession of a fur coat, an evening wrap, an amethyst ring, or a pair of jodhpurs may assume an importance far beyond what reasoned thought would show to be right. There is an old saying that you cannot put extra apples into a full bushel basket without crowding other apples out. This applies to the clothing budget for the family. You cannot crowd in new and unusual demands for clothing without crowding out something else. What shall it be? Should the father forego the purchase of a suit needed to maintain his appearance as a well-groomed professional man so that the daughter can have the fur coat that she greatly desires? Should the mother continue to wear a winter coat for the fifth season so that her college or high school daughter can have a "darling" costume suit in addition to the items already provided by the clothing allowance?

It is true that the ownership of these articles might add greatly to the daughter's joy in self-expression in dress. It is true that her parents might be proud of her seeming beauty as she stepped forth in her new apparel. But it is also true that in permitting her to take what was not her own, the indulgent parents have encouraged the self-interested daughter to remain in the self-centeredness of childhood. That means that *they* have not helped *her* to grow toward maturity. One of the world's greatest philosophers said that Justice is the important thing in the world. Justice he defined as "having and doing what is one's own." One doesn't suddenly come to accept justice as of fundamental value, nor desire it in one's dealings with others. Understanding of it is rather the result of constant striving toward it in the thousand and one contacts of daily living. Among these contacts might be listed those in-

volved in the formulation of clothing plans for all the family members.

Emergencies may arise that necessitate some adjustments in the clothing plans of all to provide for the specific need of one. Father's overcoat may be stolen, or brother's best suit may be ruined by some ill-advised expedition while he was in his "Sunday best." Adjustments for *needs* are essential and important in family life. Adjustments for mere *wants* may be disastrous in their effect on the development of individuals and in their effect on the relationships among members of the group.

15

Planning and Making the Dress of Wool or Similar Fabric

Every girl likes to have at least one wool dress. Some will prefer a two-piece dress, thus permitting the use of an extra skirt with blouses and sweaters. The wool dress made from a soft, somewhat sheer material provides one with a garment that can be worn for various seasons of the year, while the dress made from heavier material is excellent for the cold, bleak days of real winter weather. A delicate, frail, childlike person seems harshly treated if clad in the homespun or tweeds that are well suited to her athletic cousin. The mature person, bulgy in the wrong spots, may find a soft wool jersey less flattering to her than some other fabric less clinging in texture. The shining surface of black satin may prove less kind to a sallow skin than some fabric whose surface texture is less hard and more free from the trying highlights.

There may be some who will prefer to make a silk or rayon dress rather than one of wool. In such a case it is true that the many varieties in weight and texture found among silk and rayon fabrics make it possible to use these fabrics for many types of designs.

In selecting the material, one will find sheer fabrics known as chiffons, georgettes, and nets. Heavier materials are bengaline, velvet, and corded silk or rayon. Individual characteristics of the wearer will govern the choice of material as to texture and finish. Crisp taffeta suggests girlishness, soft crepes suggest demureness, and satins bespeak a sophistication out of keeping with the high school girl's wardrobe. Sheer silks and rayons appear at their best when made up with soft lines em-



Much thought and consideration should be given when buying material for the wool dress.

ploying shirrings, soft folds, or voluminous designs in the skirts.

The heavier material may be made with soft lines, as a velvet afternoon dress. When made into garments the seams of heavy silk and rayon fabrics are finished as are woollen materials. Plain seams are usually used, their finish depending upon the nature of the material. In general the finishes employed will depend upon the nature of the material. Seams in soft crepes and sheer fabrics are often finished narrower than for wool materials, and the edges are sometimes picoted. Dainty plackets, often hemmed, are most satisfactory. The hem of the skirt is often finished with a rolled edge, or it may be finished as suggested for the school dress, that is, without seam binding. Tiny snaps and thread eyes seem to be rightfully placed on the sheer silk or rayon dress.

1. How shall the material for this garment be handled?

Preshrunk fabrics. It is of the utmost importance that any fabric be preshrunk before the dress or other garment is cut from it. Many fabrics fully preshrunk are available on the market. Should the material selected not be one of these, the provision for complete preshrinking is necessary. This may be done at home by using the method suggested



Careful placement of the pattern on the material is the first step toward a well-made garment.

for shrinking cotton, or by pressing with steam, using a damp cloth and a hot iron, or a steam iron—the method employed in dry-cleaning establishments. The latter two methods are recommended as affording the more complete shrinkage and putting the fabric into desirable condition for cutting. Rayon materials usually do not require shrinking.

Handling. The nature of wool fabric is such that more careful handling is required than is found necessary in the case of cotton materials. The springiness and resilience of wool fabric requires that all pieces be basted with the utmost care, back stitching being used if necessary. Observance of carefully marked seam allowances is particularly important in working on fabrics that have great elasticity.

Some fabrics also tend to ravel, making it necessary to finish all seams properly. Of the seam finishes presented in the discussion of the cotton garment, overcasting and pinking are strongly recommended for the finished seams of a dress of wool or similar fabric. However, some fabrics, such as tweeds, are found to have a more satisfactory seam finish if the raw edges of the seams are bound.

The nature of wool fabric is such that seemingly excessive material needed for ease of movement may be successfully adjusted on a given line by shrinkage. A good example of this is found in the armscye seam-line of the sleeve. The fullness is first controlled by means of gathering threads, always made of thread to match the garment, and then by successive pressings with a damp cloth the fullness may be entirely removed. This may be accomplished to some extent with fabrics other than wool.

Some silk and rayon materials offer particular difficulties in handling. In cutting the garment, it is not advisable to mark seam allowances with chalk. The yarns are usually so closely packed together that chalk

dust cannot be brushed out. Tailor tacks are suggested as the best means of marking. Loosely woven fabrics, such as rayon meshes and chiffons, may stretch past recognition, if not handled with unusual care. In stitching such materials on the machine it is often necessary to place the seam over tissue paper, and stitch through both paper and material. The paper can be pulled away from the stitched seam. Thread ends should be secured by threading the ends into a needle and stitching them into the machine stitching with a few running stitches. The ends are then clipped close.

SUGGESTIONS TO THE CLASS

1. Choose several pictures of patterns you would like as dress designs. From these choose one that you will make.
2. Set up a plan of work for making the garment.
3. Study the pattern you have chosen, and determine the amount of material you will need to buy.

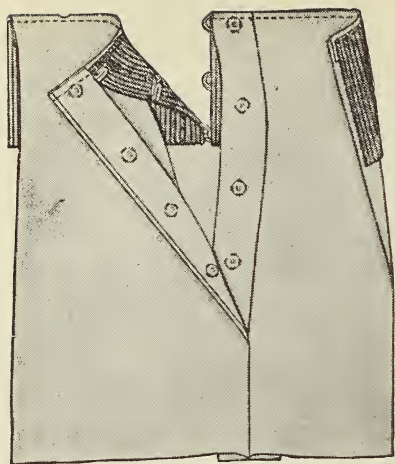
2. What new problems does this unit present?

Each garment we make should be a challenge to learn something new and to develop to a greater degree of skill the things we have already learned to do.

Let us consider some of the construction details that you may not have mastered earlier which may be useful in making this dress. You will recall that finishes such as lapped seams, tailored plackets, and bound pockets were discussed in preceding units.

Placing inside skirt belting in position. The kind of inside belting which is attached to separate skirts depends upon the weight of the skirt and the position of the waistline. Soft belting made from the skirt fabric may be used when the belt is at the normal waistline. A stiff belting, however, may be used on skirts with a high waistline. Commercial beltings, which vary in width from one to three inches, may be shaped or straight, and may be stiffened with boning or with starch. The starched belting is the least desirable because it soon loses its body or crushes in folds. If black belting is used, it should be of such quality that the color will not crock or rub off on other garments.

The belting purchased should be three or four inches longer than the waist measure to allow for shrinkage and seams. If straight belting is



Inside skirt belting may serve as the finish for the top of the skirt.

thread. The end of the belting should extend exactly to the edge of the underside of the placket. The front end of the belting should recede just the width of the upper part of the placket. When the belting is fastened, the back of the placket should be even with the end of the belting, and the front of the placket should extend beyond the belting and fasten with a snap.

If the top of the skirt is the same size as the belt, the edges are turned; the side, center front, and center back are pinned to coincide with those on the belting; and the skirt is basted in place, the belting being one-sixteenth to one-fourth inch below the folded edge. A lapped seam is stitched as near the edge of the belting as possible. The ends of the belting are attached to the edges of the placket with slip stitching.

If the top of the skirt is gathered, the skirt is attached by folding the raw edge of the garment over the edge of the belting, arranging the folds, and basting through one thickness of fabric and the belting. A narrow tape is used to face the raw edge. The skirt and facing are stitched in position by machine. The belting is folded back and the ends of the belting are slip-stitched into position. If a seam is desired on the right side of the garment, it should be made after the belt has been attached. A soft belting may be cut from the skirt fabric or from a lighter material and fitted and applied by the methods described. Such a belting should be double with the seam at the lower edge.

Inside beltings should be of good quality, shrunk, and shaped to the body. Black belting should be used on dark garments. Hooks and eyes

purchased, it should be shrunk and then shaped so that it fits comfortably. This may be done either by pressing it in a curve or by darting it in front and back. The belt should be finished before the skirt is fitted; the ends should be turned toward the outside of the belt, and hooks and eyes (except the top ones) should be sewed on in such a way that the edges of the belt just meet. The top hook and eye should be sewed in place after the skirt is fastened to the belt. The side seamline, center back, and center front should be marked on the belting with

should be in such position that the edges of the belting exactly meet.

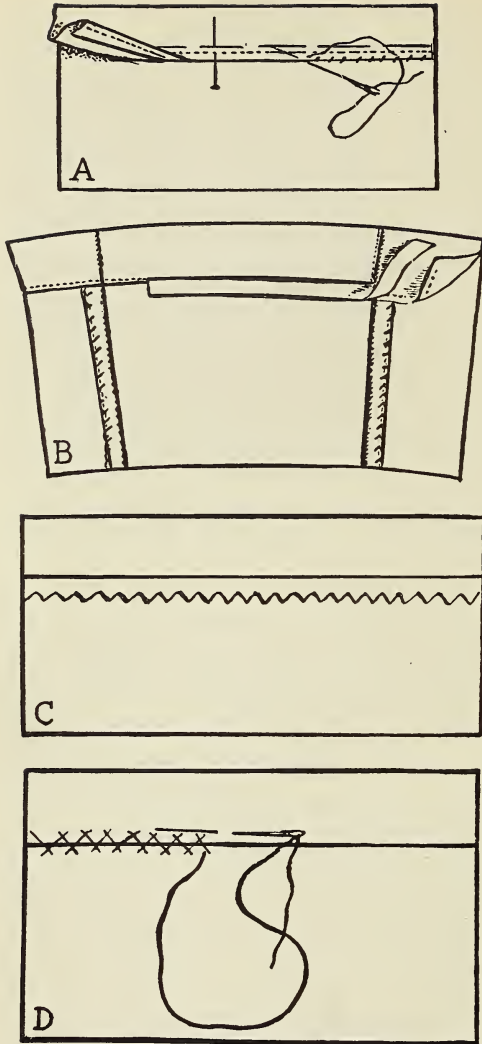
Pleats. Pleats are frequently included in the dress design selected to be developed in heavy fabric. They may extend the full length of the skirt for its entire circumference, or they may occupy a smaller part as a panel or an inset section. The pattern chosen reflects your decision as to the role you wish pleats to have in the dress design and it makes provision for cutting them. There are some points about pleats, however, familiarity with which may save you much trouble later on. In their simplest form, pleats are a series of straight folds, pressed into place, each fold being the same size at top and bottom, and each facing the same direction. If the direction that adjacent pleats face is so changed that their edges face together instead of following each other, an inverted pleat is formed. The reverse side of the inverted pleat forms a box pleat. Pleats may be used in series, and wide variation may be introduced in the spacing between them. For these reasons they are often found a most interesting means of creating pleasing areas in dress design.

It may be interesting to experiment a bit with the amount of extra fabric that the introduction of four pleats, one inch deep, requires. The pleat is all extra fullness, and therefore each pleat adds to the fabric to be used by the amount of both sides of its depth, or two inches. If there are to be four pleats, it will be necessary to allow eight inches of fabric of whatever length required. Take four pieces of paper, each of which allows eight inches to be folded out in pleats and two additional inches on each side as accent to the effect produced. Fold the first in knife pleats one-half inch in depth, edges touching the next pleat edge; fold the next paper to create two box pleats two inches wide in the center of the paper; fold the third piece of paper to make a series of inverted pleats; and with the fourth piece experiment with the creation of pleasing space arrangements of pleats. As you become familiar with the way fabric is folded in or out to make pleats, you will not dread or fear attempting the construction of a dress having pleats as a part of its design.

SUGGESTIONS TO THE CLASS

1. Examine a skirt that has an inside belting. Can you describe how it was put in?
2. Visit a department store and observe the types of inside belting on the market. Describe two kinds, and give some advantages of each.
3. With a piece of your material make three kinds of pleats. What precautions will you need to take in putting in pleats?

3. How shall the hem be put in the garment?



Various methods of finishing hems. *A*: Edge self-stitched and put in place with slant hemming. *B*: Edge bound with bias tape. *C*: Hem stitched in place below pinked edge. *D*: Hem catch-stitched over plain raw edge.

Hems are used on all types of garments. A hem should be inconspicuous on the right side of the garment and of even width and uniform stitching. It should be flat and smooth and free from diagonal folds. Hems may vary from one-eighth inch to three inches, according to the weight of the fabric and the style of the garment. On medium-weight fabrics the hem may vary from two to three inches, plus one-fourth inch for the seam. For heavy fabrics, the width of the hem is often slightly less. The hem is turned along the hemline, basted, and pressed into position.

For straight skirts, the width of the hem is measured, the raw edges are turned and pressed into position, and are then basted to the garment. For curved edges or flared skirts, the fullness must be cared for by means of darts or gathers.

Darts are used when there is

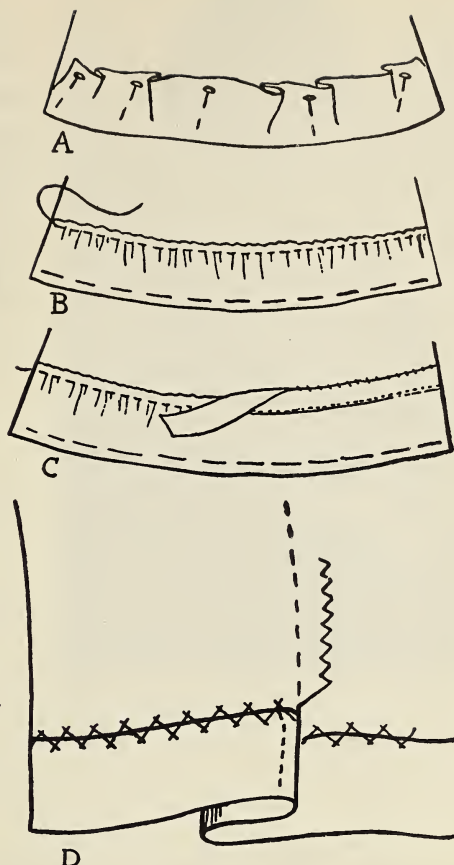
little fullness and the fabric is stiff. They should be folded at right angles to the edge of the hem and tacked in position where the fullness naturally falls. They will be more easily pressed and stitched if all darts turn toward the left. The width should be tested with a gauge before the hem is basted in position. The raw edge on medium- and

lightweight fabrics may be turned under from one-eighth to one-fourth inch, creased, and basted. Seam binding applied flat over the edge is a preferable finish.

On soft materials and on fabrics from which fullness is to be shrunk, as well as on skirts of circular cut, gathers are used. The width of the hem is checked with the gauge and trimmed. A gathering thread is run by hand or machine along the upper edge. The hem is pinned in place at center front, center back, and at seams with pins at right angles to the edge. The gathering thread is drawn up to make the hem fit the garment, and the thread ends are fastened. The gathers are distributed as evenly as possible so that the fullness falls at right angles to the edge of the hem, and then the hem is basted in place. To shrink the fullness from a hem, a thin cardboard or heavy paper is inserted between the garment and the hem to prevent dampening the

garment, and the gathered portion of the hem is covered with a wet cloth and pressed dry with a warm iron. Seam binding is sewed flat over the raw edge. The upper edge of the binding is slip-stitched to the garment. For lightweight materials, the upper edge of the hem may be turned under and this first turning self-stitched to provide a firm edge and to prevent fraying; but the final stitching should be either vertical or slip-stitch hemming.

On heavy fabrics, the top edge of the hem should not be turned under. If the fabric does not fray, the catch stitch may be used when



Making a hem in a circular skirt. *A*: The hem pinned in place. *B*: Fullness at top of hem held in place by means of a row of gathers. *C*: Fullness shrunk out, and facing of bias applied. *D*: Seam clipped at the top of hem to avoid bulkiness.



The steam iron is an excellent piece of equipment to use when pressing wool garments.

there is not much fullness in the hem. A row of machine stitching near the edge helps to prevent fraying and strengthens the edge. If the material tends to fray, the raw edge should be faced with seam binding, narrow ribbon, or other facing material.

SUGGESTIONS TO THE CLASS

1. Make three samples of ways to put a hem in a wool garment.
2. Demonstrate to the class or to your mother at home how to shrink fullness from the edge of the hem.
3. Examine the hems of your wool skirts and notice how they have been put in the garment. What changes would you suggest?

4. *How shall the wool, silk, or rayon garment be pressed?*

It is important that special precautions be taken when wool fabrics are pressed during the process of constructing the dress. The garment is put on the board, wrong side out. A damp cloth is placed over the surface and a warm iron is rubbed over it until the damp cloth is almost dry. This drives the steam into the fabric. The damp cloth is removed, being replaced with a dry cloth or paper, and the pressing is continued until the area is almost dry. The tendency of wool to scorch when heat is applied directly makes it absolutely necessary that a cloth or paper be kept constantly between the iron and the wool fabric. When a steam iron is available, these fabrics may be satisfactorily protected with only a dry cloth or paper.

The silk or rayon garment will also require special care in pressing. A moderate temperature for the iron is necessary, and water must be used carefully as some fabrics may water spot. The garment is put on

the ironing board, wrong side out with a dry cloth next to the material and the damp cloth on top. This permits only steam, produced when the heat is applied, to come in contact with the fabric. Some rayon materials present special problems which you learned about in your study of textiles. It is necessary to know your material when pressing any garment.

SUGGESTIONS TO THE CLASS

1. If using wool material, measure the width and length. After steam pressing it, measure again and calculate the percentage of shrinkage, width-wise and lengthwise.
2. Make a list of the equipment desirable for pressing the garment you have made.
3. Make a sample of another type of hem that could be used in the garment you have made.

5. How shall the garment be judged?

In making this garment you have been more or less free to choose your own material and pattern. This means that there will not be many problems common to each of you. By this time you have developed a standard of workmanship which should be comparable to the best that can be done by you and your classmates. You no doubt know what you desire from clothes. Do you enjoy clothes? Is workmanship important to you? Should garments fit well? Have you done your best in making this garment?

At this time, it might be well to check over other score cards and select one that you can check your dress with. You will need to ask yourself what has been the most important point in making this garment. Have you gained knowledge and some skill in doing the job? You should be able to see improvement in your workmanship and to feel ease in doing the work.

SUGGESTIONS TO THE CLASS

1. With the class, plan a score card for judging the garment you have made.
2. Judge your garment and the garment your partner has made. Is the score card equally good for each garment?
3. Make a list of items to consider when planning to make a wool garment.



Carefully matched plaids and a good fit make this an attractive garment.

SUMMARY

The girl of today is somewhat handicapped in her choice of fabrics. This is probably due to her lack of familiarity with the fiber and with steps in the construction into a fabric. This unfamiliarity is a result of the passing of textile production from the home with the coming of the Industrial Revolution. Only by study and experience can the girl of today develop a sufficient body of subject matter to enable her to become a wise purchaser of wool fabrics.

The knowledge gained by testing various fibers and fabrics will give some help in identifying fibers when we purchase materials. There are different methods for handling and cleaning wool and silk, since they

are of animal origin. This is also true of our various types of synthetic fabrics.

Construction details which are common in the making of dresses of wool, silk, or rayon but which were not previously presented in the discussion of making cotton or linen dresses, include the placing of the inside skirt belt in position, providing for taking out the fullness in skirt hems, and the making of pleats. Mastery of new construction details before beginning work on the construction of the dress is strongly recommended.

16

The Tailored Garment

Tailored garments for women and girls now hold an important place in the wardrobe. Women's activities are such that this type of garment is essential. Sportswear suggests simplicity of cut and restraint in design. Street wear likewise seems to call for effects that are obtained in tailored apparel. In fact, garments for all occasions may appropriately be chosen from designs embodying tailored lines. Many dinner dresses are extremely simple and are topped with jackets that might well serve for street wear. Some business women find that the tailored suit with several types of blouses serves them for all daytime occasions.

1. How shall the design and material for a tailored garment be selected?

Design. The beauty of a design for the tailored garment depends upon a few simple lines rather than upon elaboration of design. These lines usually repeat some structural line of the body, curved as well as oppositional lines being employed to gain a tailored effect. Mannishness need not characterize tailored designs, for there are those which are suited to the typically feminine type of person. In choosing a design for the tailored garment, it is well to recognize one's personal characteristics, and to keep in mind the purposes for which the garment is to be worn. Most girls and women need a simply cut, sturdy wool coat for general wear. The lines, however, may vary with the characteristics of the wearer.

The aggressive girl who is firmly built and who can keep pace with

her brothers in sports will probably enjoy the style of a tailored garment that is not so different from that her brother might choose. There will be simple lines in the collar, yoke, and pockets which will be straight or slightly curved and usually will express strong opposition. The girl who is somewhat retiring, mild spoken, and perhaps a little shy will find that curved lines in the collar, yoke, and pockets and more elaboration in design are well suited to her. When girls of these two types purchase suits, they will again consider their personal characteristics as they choose between boyish simplicity and the more feminine lines.

Choice of materials. Although the characteristics of a tailored garment limit the choice of materials to those that are relatively firm in texture, some fabrics made from each of the fibers may be used satisfactorily. Cotton and linen suitings are often made up as carefully as are wool fabrics, and some excellent tailored effects are attained in firm silks and rayons. Tailored suits of heavy rough silk or rayon fabrics in white and pastel colors were once popular. However, wool fabrics are most commonly chosen for tailored garments because wool can be manipulated by shrinking out fullness rather than employing gathers and folds, and it has sufficient body to lend itself to tailored lines. It also withstands long wear and gives to the wearer the service desired from sturdy outer apparel.

The knowledge gained in the study and making of the wool garment should be helpful in choosing a fabric that will tailor well. Fabrics that stretch badly will be avoided, as will those that are difficult to press, since any difficulty in pressing indicates that a shiny surface may develop. Fabrics containing a large proportion of cotton or reworked wool often wrinkle badly and are not recommended. Materials having an up-and-down, or nap, present additional problems. More material must be purchased so that all pieces may be placed with the nap running in the same direction, and pressing must be done carefully so as not to disturb the nap.

SOLD BY

<p>90% Wool</p> <p>Reused Wool</p> <p>% Wool</p> <p>% Silk</p> <p>Wght'd to %</p> <p>%</p>	<p>Reprocessed Wool</p> <p>10% Wool</p> <p>% Rayon</p> <p>% Cotton</p> <p>%</p> <p>%</p>
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EXCLUSIVE OF ORNAMENTATION

Labels giving accurate information on the fiber content of coat materials are now in general use.

SUGGESTIONS TO THE CLASS

1. Examine swatches of wool material used for men's suiting. Compare these fabrics with wool materials used for women's garments. In what respects do the two classes of materials differ? What are the characteristics of men's suitings that contribute to the well-tailored appearance of the finished garment?

2. Bring to class samples of fabrics representative of each of the textile fibers—namely, wool, silk, rayon, linen, and cotton—that you believe might be developed into a satisfactory tailored garment.

3. Find illustrations of coats that suggest different ideas as to use, such as the sports coat, the formal coat, and the general utility coat. Also find illustrations of suits intended for different purposes. Select materials that you believe would be satisfactory for each design.

4. Choose designs for coats and suits that you believe would be well suited to the tall slender girl, the short plump girl, and yourself.

2. What new problems arise in the construction of a tailored suit or coat?

The simplicity of design characteristic of tailored garments necessitates a quality of workmanship that can be gained only with considerable practice. Before attempting to make a coat or suit, one should have had experience in working with wool or similar fabrics and should have made several garments.

Shrinkage. Having chosen the material in relation to the pattern, it is necessary to make sure that shrinkage of the fabric cannot occur in the finished garment. Some wool materials may be purchased pre-shrunk, and others must be shrunk either by the tailor or by the method previously suggested for wool materials.

Cutting. The cutting, the preparation for fitting, and the fitting are processes similar to those followed in the construction of other garments, with the addition of a few new problems. The beginner may find it helpful to cut the coat out of unbleached muslin, and fit it before cutting the wool material. She will thus avoid many mistakes. Seams are cut at least one inch wide. Notches are cut outward from the pattern parts, or tailor tacks are used indicating parts to be joined. The latter method is preferred. The collar pattern is placed on the material so that the center back is on the lengthwise of the material unless the design demands otherwise. The collar facing is usually placed with the center back on a somewhat bias edge so that the line where the collar joins the

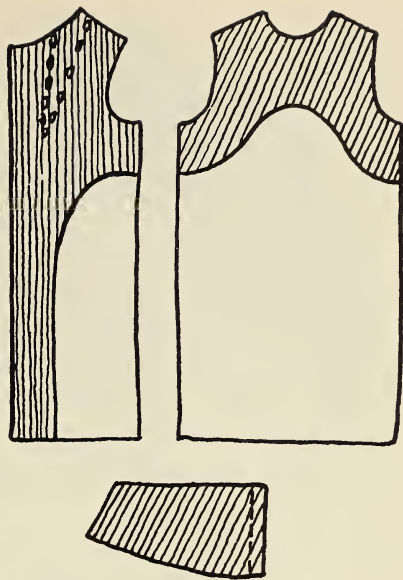
lapel is straight. Seam lines, darts, and the markings for pocket placement are carefully marked with a chalk board and tracing wheel or with tailor tacks.

Interfacings. Interfacings are used in coats and jackets as reinforcements around the neckline, armscyes, wrists, and hem line. There are several materials used for interfacings, unbleached muslin that has been shrunk, lightweight cambric, percale, wigan, or, for a more sharply tailored effect, tailor's canvas.

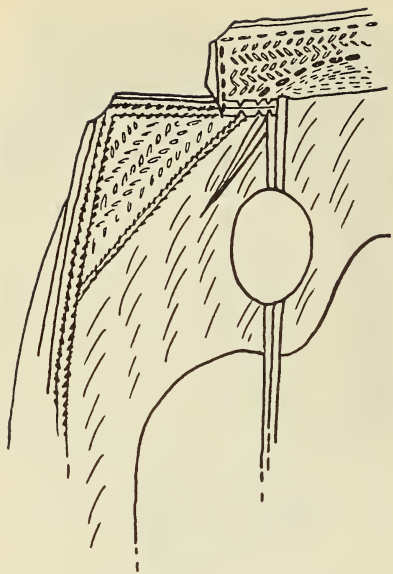
The interfacing is cut following the outline of the pattern for the front, extending to the hem of the garment, out over the shoulder, and to a depth of two or three inches below the armscye. A curved line from the point two or three inches below the armscye to a point on the hem, four or five inches from the front edge, is drawn in with chalk and cut as in the drawing on this page. For the back facing, which is often laid with the true bias at the center back, it is cut following the neck and shoulder line, around the armscye, and to a depth of two or three inches below the armscye. The lower edge is curved upward in the center back to avoid bulkiness and to give the greatest amount of freedom. The interfacing for the collar is cut on the bias. If it is desirable to give more body to the hem and to the cuff line, a bias strip is slipped into the fold and the hem is fastened to it. For a cuff, the piece should be five or six inches wide, for the lower edge of the garment, two or two and one-half inches wide.

If the coat is to be finished without a lining, less reinforcement will be possible. A four-inch strip of interlining fabric will then be used down the front of the coat.

Interlinings. An interlining may be needed in the coat for warmth. Outing flannel or Canton flannel in an inconspicuous color are in common use. Wool interlining, either a loosely woven fabric or fleece quilted between cheese cloth may be had. Interlining of Aralac has also seen wide use. The pattern for the coat is used to cut the interlining. In



Cutting the interfacing. Note that the back and the collar facing are cut on the bias.



The interfacings are attached to the body of the coat with tailor bastings. Fairly short stitches are used for the revers and collar, and long, loose stitches for the remainder of the facing.

some cases, particularly when a two-piece sleeve is used, only the outer section of the sleeve is interlined. The collar is never interlined.

Basting the coat. The interfacing pieces must first be attached to the coat or jacket material with several rows of diagonal basting running from the neck down the center front. Other lines of diagonal basting are used around the neck, the armscye, and down the center back.

After the interfacing pieces have been attached, baste back the seam allowance down the front and pin and baste the shoulder and the underarm seams. The coat is now ready for its first fitting. Try it on after a good pair of shoulder pads that are made especially for a coat have been placed in the basted garment.

Fitting the coat. In fitting the coat there are several points to watch for. First, it must fit closely around the neck. The shoulder seams should fall on the normal shoulder-line and the underarm seams should be perpendicular to the floor. Filling threads at the chest line and width of the back should be parallel to the floor. If there is a tendency for these to droop at the armscye, the shoulder seam must be ripped and deeper shoulder darts must be taken in the front and back. Fullness may be removed at the neck with darts or with gathers which are later shrunk out.

Even though you have checked the fit of the coat in muslin, there may be need for a few changes. The difference due to the bulkier fabric and the greater elasticity of wool fabric will possibly show up as you



Darts are stitched, then cut and pressed open. The interfacing or interlining may or may not be stitched into the dart, depending upon the weight of the fabric.

fit the garment this first time. Care must be taken to avoid stretching the armscye curve. Check the width of the lap carefully so that you have plenty of width for buttonholes. Remember, too, that you want this garment to be roomy enough to wear over a blouse or a dress.

Stitching the garment. The shoulder seams are now opened so that the shoulder darts may be stitched. Usually the stitches holding the interfacing are clipped to free the garment of the extra layer of fabric, and the dart is stitched only in the outer fabric. The dart is then cut and pressed open as shown in the drawing on page 524. The dart in the interfacing is cut away entirely and the raw edges are slipped under the dart in the outer fabric and are fastened in place with diagonal basting. If any fullness remains at the point of the dart, it may be removed by shrinking. Following this, the shoulder and underarm seams are stitched and pressed open.

SUGGESTIONS TO THE CLASS

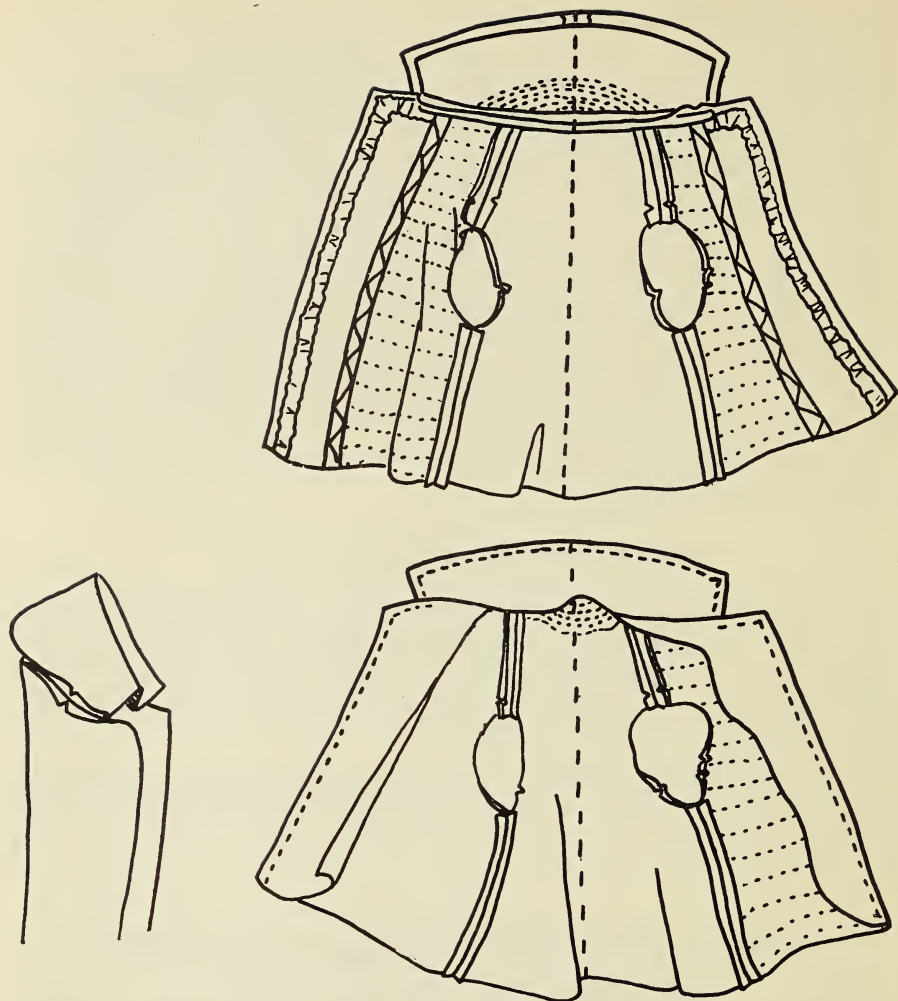
1. Bring to class a number of coats and suits. Examine these for details of garment construction. Do you find interlinings used under the lapel facing? Have the front edges of the coat been stayed with tape? Have darts been used at the neck of the garment to mold the material over the chest and back?

2. Note the materials used for interfacings or interlinings in the coats you have examined. What characteristics of these fabrics make them suited to the purpose?

3. How shall the facings and collar be applied to the coat?

There are two methods by which the collar and the front facing are attached to the coat. The first assures a well-fitted neckline but requires careful handling. The second is a quicker method but often does not give such satisfactory results.

Front facings. In the first method, the front facings should now be applied to the garment. With the right side of the facing placed directly on the right side of the coat, pin them in place and baste. Stitch on the front facings leaving free only that portion at the neck where the collar will be attached. The seam line should be "shaded," that is, trim one edge a scant one-fourth inch and the other a wide one-fourth inch, thereby avoiding the sharp ridge that would result if both edges



A second method of attaching the collar to the coat. *Top*: The collar facing sewed to the body of the coat. *Bottom left*: Front facings of the coat attached to the collar. *Bottom right*: The front facings and collar applied to the body of the coat.

were the same width. If the coat fabric is fairly firm, the interfacing will be sufficiently firm to stay the front seam. If the fabric is a loosely woven tweed taping may be necessary to prevent the edge from stretching. This is done by applying three-eighths inch shrunken linen tape along the seam, sewing down by hand both edges of the tape to cover the wider of the raw edges along the front. A strip of the tape may be applied to the lapel to define the line where the rever turns back. The seams down the front of the garment should be pressed open, and a

crease should be formed where the facing turns back to the inside. Then the front edges should be basted the entire length of the garment and around the end of the lapel.

Pressing. Care must be taken as the tailored garment is pressed to avoid developing a shininess along the seams. Press from the wrong side whenever possible, and always protect the fabric with a heavy canvas press cloth. Better results will be had if you will stop pressing while vapor is still rising from the fabric.

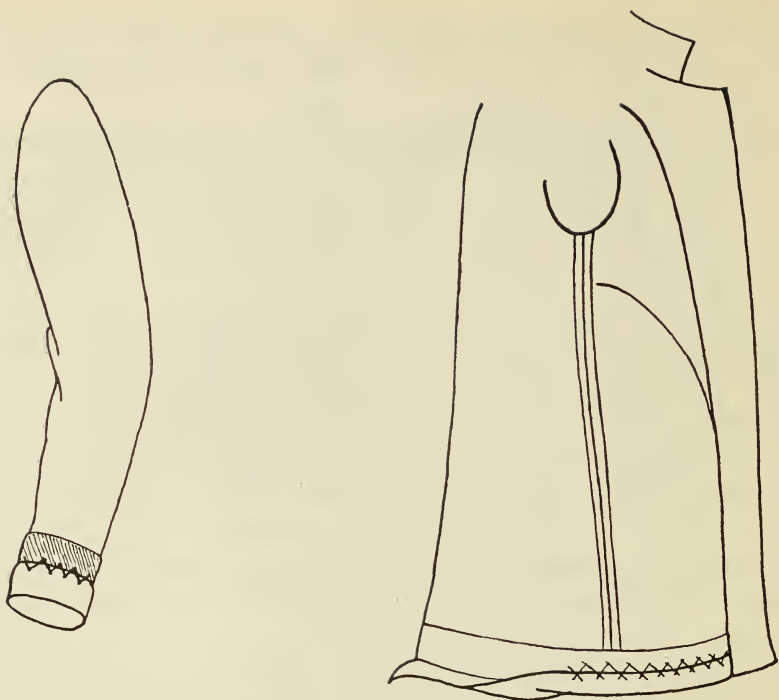
The collar. Now you are ready to begin making the collar. Stitch the bias seam in the under part of the collar, and press it open. Place the bias-cut interfacing directly over the pressed open seam, and pin and baste it in place. After you have marked the line indicating the collar stand, quilt this semicircular section closely with small diagonal basting or padding stitches that follow the curve. Now, working from the center back, make rather widely spaced padding stitches throughout the entire collar, catching the two layers of fabric together but stitching so lightly into the coat fabric that the stitch does not show from the right side.

The edge of the collar which will be attached to the coat must be shaped to the depth of collar stand by steaming and stretching. Finally, the collar is creased lightly to form a fold at the top of the stand.

Apply the underside of the collar to the neckline of the garment by beginning to pin from the center back and working to the right and left around to the lapel. The coat should be tried on to be sure that the neckline and collar set well. See that the collar hugs the neck in the back and that the lapels lie flat where they join the collar.

After fitting, the underside of the collar is sewed to the neckline of the garment with the seamline to the outside. The neck seam is pressed open and the outer part of the collar is then applied. The seam allowance on the interfacing must now be trimmed away. Working from the center back and holding the two right sides of the material together, the under and the upper collars are pinned and basted together on the seamline. After machine stitching, the seams are trimmed, and the collar is turned. The raw edges, from the point where the collar joins the lapel back to the shoulder seam, will be turned under and sewn down by hand using a very fine slip stitch.

A second method of attaching the collar and facing is by first sewing the collar facing to the main part of the garment. The seam is stitched and pressed open after the fit of the garment has been assured. Then the facings of the coat are joined to the outer part of the collar to make a



The bias strip of interfacing is used as reinforcement. *Left:* On the sleeve where no cuff is used. *Right:* On the hem of the garment.

facing for the neckline of the coat, and the seams are pressed open. The right side of the facing is placed to the right side of the coat, and the edges are pinned together and basted. After the garment has been tried on to assure an accurate fit, the seam is stitched beginning at the lower edge on one side and continuing around the collar and down the other side of the front. The seam is then trimmed off closely, the facing is turned back, and a basting line is placed along the outer edge. The seam which joins the collar with the front facing is fastened by hand to the collar seam. In either method, the inner edge of the front facing is attached to the coat with the catch stitch.

SUGGESTIONS TO THE CLASS

1. Find examples among finished coats or jackets of: the typical notched collar; the Tuxedo collar; the large, convertible collar. What differences do you note in the way in which the underside of the collar is cut? Can you tell how the collars and facings were applied?
2. Compare hand-tailored garments with those that are made under factory conditions. Which do you like best?

4. What new problems arise in setting in the sleeves and hemming the coat?

The next step is setting in the sleeves. A double row of gathering stitches are placed on the seamline of the sleeve, the excess fullness is eased in, and all traces of gathers are removed by shrinking. The sleeves are placed in the armscyes according to the notches, and then they are pinned in and basted. If the size of the sleeve has been properly adjusted to the armscye and the excess fullness has been removed by shrinking, the seam will be free of gathers. The coat is then tried on to make sure that the sleeves have been properly placed; the seams are stitched and trimmed, and the outside curves are clipped. The armscye seam is finally pressed open. The tailor's cushion is an aid in pressing the armscye of a coat.



Finish of lower edge of the facing and hem. Note that the lower edge of the front facing extends to the hem's edge.

The lower edge of the sleeve is often finished by turning back two to three inches of the sleeve length. The interfacing is slipped into the hem so that it touches the fold. (See the illustration on page 528.) The upper edge of the hem is catch stitched to the interfacing. If a cuff is attached, the sleeve is faced back with a three-inch fitted facing.

The lower edge of the coat is finished with a narrow hem. The length of the garment is taken the same as for dresses, and the hem is turned back along the marks. After the coat is tried on to insure that the hem is even, the upper edge is trimmed for a two-inch hem, and the fold is pressed. Any fullness along the upper edge of the hem is taken out by shrinking. If an interfacing is used in the garment, the bias strip is slipped down to the fold of the hem, and is held in place with catch stitching placed at the upper edge of the hem.

If an interlining is used, it is trimmed off even with the fold of the hem, and the hem is turned back over it and is catch stitched in place.

The lower edges of both front facings extend to the lower edge of the hem. The bulkiness resulting from the overlapping of the facing and the hem may be corrected by trimming off the lower edge of the facing along the lower edge of the hem, and finishing the edge of the facing by slip stitching it to the hem.

SUGGESTIONS TO THE CLASS

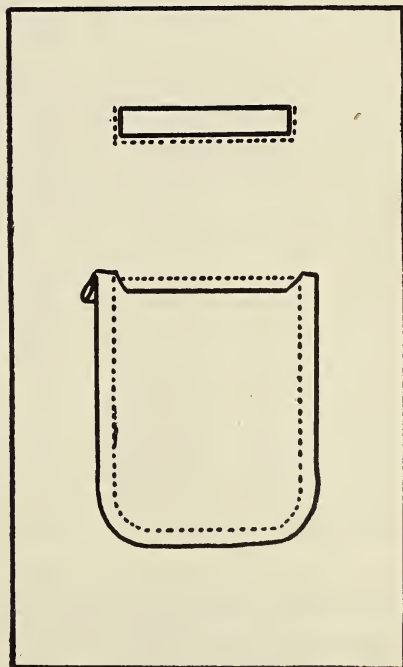
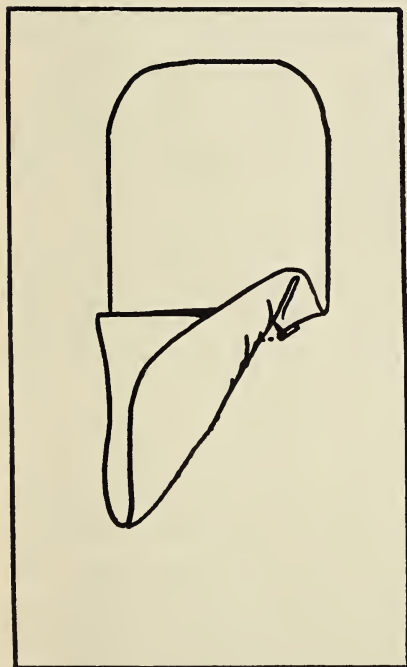
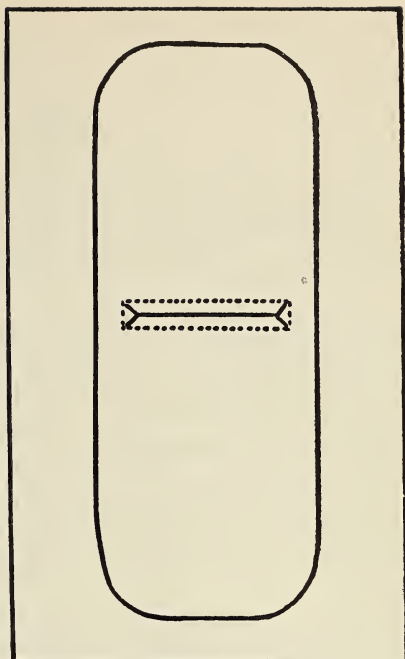
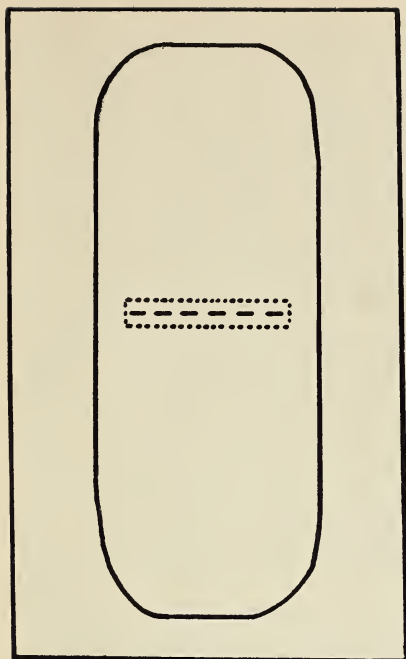
1. Examine the coats of members of the class to learn how the sleeves have been set in. What steps have been taken to remove fullness at the top of the sleeve? How has the bulk in the heavy armscye seam been reduced?
2. How has stretching at the armscye of the coats been prevented?
3. What width material has been turned back at the wrist of the coat sleeve?
4. Examine a number of coats for satisfactory hem treatments.

5. What new problems arise in making pockets and applying fasteners to the coat?

Pockets, either set-in, tailored, or patch, may be a part of the design of the coat. Directions for making these have previously been given. They must be placed before the front facing has been stitched to the garment.

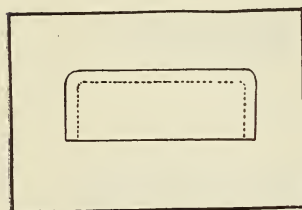
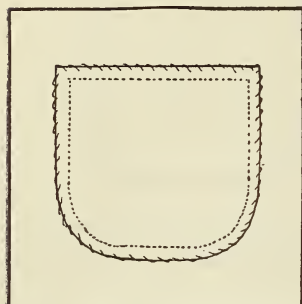
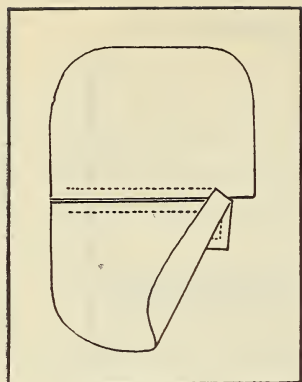
The welt pocket. The welt pocket is similar to the bound pocket except that a wide binding shows on only one side. It is used on men's garments and on women's tailored dresses and suits. The pocket may be placed vertically, horizontally, or on the bias in the garment, but the pocket itself should always be cut on the lengthwise yarn to insure strength. If a decorative finish is desired, the welt may be cut as a separate piece and the pocket sewed on later. Sometimes the separate welt may be lined with lighter weight fabric. The binding or welt should be uniform in width and well proportioned. The corners should be securely fastened. The pocket should be smooth and flat, and scarcely visible from the right side. (See the accompanying illustrations.)

A one-piece welt pocket, similar to the bound pocket, is easily made and is durable. The position of the top of the welt for the pocket is marked with a basting thread on the garment. A piece of material, the width of the pocket plus one inch and twice the length of the pocket plus one-half to two inches, is cut on the lengthwise thread. The center of the pocket piece is marked across the fabric with basting. The pocket piece is placed on the garment, right sides together, with the marked center line from one-half to five-eighths inch below the basting on the garment. With the basting line which marks the position of the pocket as the upper side, a rectangle as long as the pocket and one-half or five-eighths inch wide is stitched in. The number of stitches at the two ends should be exactly the same to insure the correct width of the welt. The



Top left and right: Shows the pocket opening marked, the stitched line around the opening, and the opening out.

Bottom left: Illustrates turning the pocket to the wrong side. *Bottom right:* The upper part shows the pocket on the right side of the garment; the lower part shows pocket on the inside.



The welt pocket. *Top:* The two pieces of the pocket and the welt stitched in position. *Center:* the wrong side of the completed pocket. *Bottom:* The right side of the completed pocket.

pocket slash is made through the two thicknesses of fabric, one-half inch below the upper line of stitches and one-fourth inch from each end of the rectangle. The fabric is then cut diagonally almost to the stitching at each corner. The pocket is pulled through to the wrong side, the back of the pocket is creased downward, and the seam is pressed open. The front of the pocket is folded to form a binding just wide enough so that the folded edge exactly meets the seamline above the opening. If the material is heavy, the wide seam on the front piece should be folded and pressed downward out of the binding, but if the material is medium- or lightweight, the extra material in the seam serves as a reinforcement which is not too bulky. The binding may be stitched in place by hand or machine. The two pieces of the pocket are folded together and stitched. Care should be taken to catch the triangular pieces at the end of the welt so that it will be securely fastened and strong. The raw edges should be finished in the same way as the rest of the garment.

A welt pocket with the stand cut separately may be used rather than the pocket made of one piece. Prepare the welt by cutting two lengthwise strips of fabric one and one-half inches wide and four and one-half inches long. An interlining of lightweight, unbleached muslin should be used to give the welt firmness. Stitch a one-fourth-inch seam on either end and across one long side. Then turn, baste the outer edge, and

trim stitch the welt. After pressing, place this welt with the finished edge downward along the line marked for the position of the slash on the right side of the fabric. Cut two pieces, each five or six inches wide and five inches deep, to form the pocket. These pieces are then placed as indicated in the first diagram on this page, one piece extending down-

ward and the other upward. Baste to allow for a one-fourth-inch seam on the welt. Parallel rows of machine stitching exactly the length of the welt are placed one-fourth inch from the cut edges of the pocket pieces. After the thread ends are fastened, a slash is cut in the garment exactly the length of the welt, the pocket is turned to the wrong side, and the welt is turned upward and fastened in position by hand. The pocket is finished on the wrong side as indicated in the second diagram on page 532.

Bound buttonholes. Bound buttonholes must be made before the facing is stitched down. It is best for the beginner to mark the position for buttonholes and pockets after the length of the garment has been determined. Directions for making bound buttonholes will be found on page 430. Cloth loops are sometimes substituted for buttonholes. If this is the case, the stitching which joins the right front facing to the coat is clipped, and the cording is inserted and fastened securely by hand.

Buttons. Buttons sewed to a coat are attached much as those for dresses except that the shank is longer. A match replaces the pin as the stitches are taken. It is recommended that small buttons be placed underneath to reinforce the fabric.

Coat without lining. A coat that is to be finished without a lining is constructed according to the directions just given, with the exception that only narrow interfacings may be used down the front of the garment and that seams and hems must be appropriately finished. Raw edges are often bound. Self-stitched seams may be used on lightweight material. The unlined coat reveals the skill or lack of skill of the worker. If it is poorly constructed, showing uneven and carelessly made seams, its attractiveness is largely canceled.

SUGGESTIONS TO THE CLASS

1. Practice making a welt pocket in material suitable for a coat or pocket. Compare the welt pocket with the bound pocket.
2. Make a bound buttonhole in the material that you are using to make your tailored garment.
3. Demonstrate for the class the proper method of sewing on coat buttons with shanks and those that sew through from the top.
4. Visit a tailor's shop and have the pressing of a finished garment demonstrated for you. Note the care given to prevent any tendency for "shine" to appear. How is the garment handled so as to mold it to the curves of the body?

6. *How shall the coat be lined?*

The lining for the coat should be selected so that it will contribute to the durability, comfort, and beauty of the finished garment. Some materials recommended for linings are flat crepe, crepe de Chine, satin, and Canton crepe. A satisfactory lining should be pliable and light in weight, yet sufficiently durable to withstand the strain of many wearings, the rubbing of garments worn under the coat, and the strain at the seams. It should not crock. Because silk materials having these qualities are relatively expensive and difficult to obtain, some rayon fabrics selling for less than silk are now in common use. A number of these, especially those of twill construction, have proved to be highly satisfactory because they withstand a great deal of friction without showing breaks. Many suits and coats for men are lined with these materials, and they are being used more and more for women's garments, especially of the sports type. Care must be taken, however, to obtain fabrics of balanced construction and to cut the linings with wide enough seams so that there is no chance that they will pull out.

A full-length coat usually requires two lengths plus two hems for a lining, if thirty-nine-inch material is used. The lengths are often joined with a center back seam, and sleeve linings are cut from the front edges of the lining. One lengthwise piecing is necessary in the sleeve lining. Short coats require two lengths and a sleeve length.

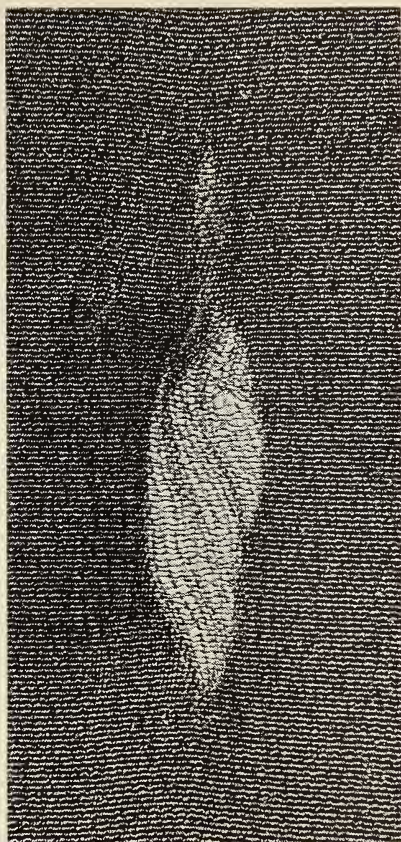
The original pattern of the coat is used for cutting the lining. An inch fold is laid in the center back to allow fullness, and seams one inch wide or wider are allowed throughout. A satisfactory lining fits loosely.

In addition to the numerous pressings given the coat while it is being made, a thorough pressing is given before the lining is placed. The underarm and sleeve seams are first stitched and pressed. The lining is then pinned to the coat, with the wrong sides placed together. The underarm seams of the lining and of the coat are fastened together by hand as far as the hipline or below. Beginning at the neckline, the center back of the lining is pinned to the center back of the coat, the raw edges being turned in around the neck. The shoulder seams of the lining are adjusted to the shoulder seams of the coat, pinned in place, and sewed in securely with the slip stitch. The edge of the lining is then turned under down the front of the coat to cover the edge of the facing, and is pinned, basted, and slip stitched in place. The lining is securely fastened around the armhole with hand sewing, preparatory to lining

the sleeves. With the coat sleeve wrong side out, the lining is slipped on right side out and is tacked to the coat sleeve along the seamline, and the seam is turned under at the arm-scy. After the sleeve lining is carefully adjusted, it is hemmed or slip stitched in place. The edge of the lining is then turned under at the lower edge of the sleeve and securely fastened.

The lower edge of the lining may be finished with a hem one or two inches wide that is left free of the lower edge of the coat, or it may be slip stitched to the hem of the coat. In the latter case, the lining must be left long enough so that when it is stitched in place a fold will form which parallels the hem.

To further anchor the lining to the coat, the fold laid down the center back is tacked in with a few fine catch stitches or cross stitches near the neckline and near the hem. A loosely fitted lining held in place securely is more durable as well as more comfortable than one that seems to have no moorings.

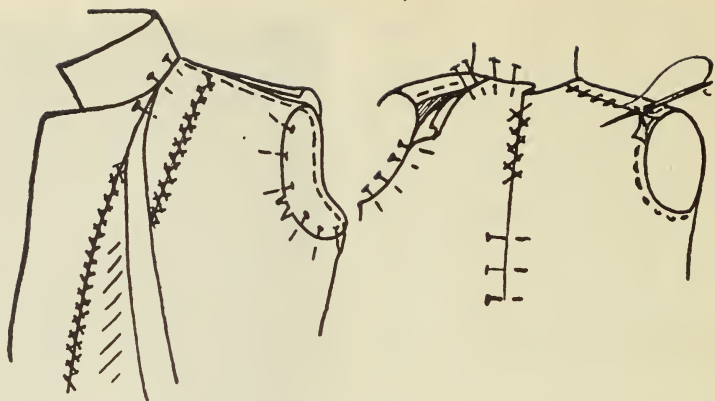


Fabrics for coat linings should be firm enough to withstand the strain of hard wear without showing slippage. The warp yarns in this fabric slipped when the thumb test was given.

SUGGESTIONS TO THE CLASS

1. Obtain samples of materials suitable for coat linings. Can you identify the fiber from which each is made? What method of fabric construction do you find most often? Give each the "thumb test" for the balance in fabric construction. Considering appearance, price, and durability, which is the best material to buy?

2. Examine a number of coats or jackets to learn how linings are set into the garment. What stitch has been used to sew the lining to the body of the garment? Why have pleats been laid in the lining at the center back and at the midpoint in the shoulder of the front of the coat?



Putting in the coat lining. *Top*: The lining is pinned, basted, and stitched into the body of the coat. Note the pleat laid in the center back of lining. *Bottom*: The lining of the body of the coat and the sleeve lining pinned into place.

3. Reline a coat for which the original lining has worn out. What pattern will you use for your lining? How can you estimate the amount of material required? What will determine the quality of the lining that you purchase?

SUMMARY

Tailored garments now hold an important place in most feminine wardrobes, and, because of the simplicity and smartness of these garments, many persons are interested in attempting at least one problem in tailoring. Success in such efforts depends upon taking every precaution previously discussed to see that the fabric is fully preshrunk and that the pattern is *exactly* adjusted to the measurements of the individual. A check may be made of the corrected pattern by cutting it out of unbleached muslin, basting it up, and checking the fit.

New problems in construction that must be mastered include the application of interfacings and interlinings, fitting the fabric by taking darts, and joining the collar to the garment. The choice of a coat lining and the procedure in making and placing the lining are also perplexing to the beginner. Thoughtful consideration of just what it is one wishes to achieve, and acceptance of the importance of exactness in measurements and in work are essential to success in any tailoring effort.

A list of tailored garments often made in high school clothing classes includes skirts, slacks, jackets, coats, and suits. Each of these presents unique problems in planning, cutting, fitting, and finishing. The degree of satisfaction to be gained from one's work depends upon the care and skill shown step by step.

The making of tailored garments may result in a considerable saving if the results of one's efforts bring satisfaction. Skill in tailoring permits the remaking of partly worn garments, thus extending the wardrobe, saving money, and utilizing fabrics which might otherwise be worthless.

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